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WEST VIRGINIA UNIVERSITY AGRICULTURAL EXPERIMENT STATION,

MORGANTOWN, W. VA.

BULLETIN 79.

JANUARY 1ST, 1902.

Commercial Fertilizers.

By J. H. STEWART AND B. H. HITE.

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[The Bulletins and Reports of this Station will be mailed free to any citizen of West Virginia upon written application. Address, Director of Agricultural Experiment Station, Morgantown, W. Va.]

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REPORT OF THE WORK ON COMMERCIAL FERTILIZERS, FOR THE YEAR ENDING DECEMBER 31, 1901.

This bulletin is a complete report of the work required by the Fertilizer Laws of this State for the year ending Dec. 31, 1901.

On May 2nd, 1901, a New Fertilizer Law went into effect, but the great majority of the fertilizers were registered prior to that date and so had to be carried through the year as though no new law had been enacted. A report of the comparatively few brands registered under the provisions of the new statute will be found in in Table III. A copy of the New Law will be found on the last pages of this bulletin. We have already had occasion to call attention to the merits of the New Law in Bulletin 77, entitled 'The New Fertilizer Law," so it will not be necessary to make any further comments upon it in this connection, except perhaps to state, that our experience with it during the past year has only tended to strengthen our convictions in all that was claimed for it in the bulletin referred to.

For the reasons above named this report must follow for the most part the same lines of the many fertilizer reports already issued from this Department. It consists essentially of two tables; dhe first, comparing the samples submitted by the Manufacturer with his affidavit, and in regard to it little need be said, in as much as both the sample and the affidavit are provided by the same party and there need be no reason why the two should not agree, and whether they do agree or not is a matter of little or no consequence to the purchaser.

Table II. Compares the analysis and valuations of the sample submitted by the Manufacturers (official sample), with the samples of the same goods actually found on sale in the State by authorized Inspectors of the Station, or submitted by purcharers of Commercial Fertilizers in accordance with the rules and regulations of this office. This table is a matter of much importance to the purchaser of commercial fertilizers. It shows very clearly that while the great majority of the brands shipped into the state compared very favorably with the samples submitted by the Manufacturers, that there are however, quite a number of brands that fell altogether too far short, and the farmers who have been following these reports from year to year will have little difficulty in locating the companies who have shipped the short goods into this state during the past year. A careful examination of this table will furnish the very strongest arguments in favor of the New Law which devotes itself exclusively to goods actually found on sale in the state, or submitted by the farmers.

TABLE I.

Analysis of Commercial Fertilizers—1901.

or Valuation According to Guaranteed Analysis.	8. 00 1. 22 1. 03 2. 79 2. 00 20.50 16.75 8. 00 1. 22 1. 03 2. 79 2. 00 20.50 16.75 8. 00 1. 03 0. 82 1. 48 1. 00 16.25 01. 18.75 10.00 2. 70 2. 00 16.25 13.75 10.00 2. 70 2. 00 17.00 15.00 14. 00 2. 70 2. 00 17.25 16.50 9. 00 0. 97 0. 82 5. 57 2. 00 21.25 17.00 8. 00 0. 84 0. 82 4. 58 1. 00 18.56 14.75 10.00 5. 05 2. 00 18.75 15.00 14.00 5. 05 2. 00 18.75 15.00 14.00 5. 05 2. 00 18.75 15.00
Valuation of Official Sam-	27.25 18.75 20.50 23.00 17.00 17.25 21.25 19.50 18.75
Potash Guaranteed.	2.79 2.00 20
Potash in Official Sample,	2 2 2 1 2 2 2 4 7 .
Nitrogen Guaranteed.	8.00 1.22 1.03 8.00 1.22 1.03 8.00 0.84 0.82 7.00 0.94 0.82 10.00 0.97 0.82 8.00 0.84 0.82 10.00 0.97 0.82
Nitrogen in Official Sample.	2.25
Available Phosphoric Acid Guaranteed.	2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2
Available Phosphoric Acid in Official Sample.	9.81 7.82 111 10 14.64 14.64 19.97 16.20
Total Phosphoric Acid	26.08 22.00
Total Phosphoric Acid in Official Sample,	26.03 22.00 15.53 9.00 9.81 8.00 11.18 9.00 9.81 8.00 11.18 11.00 11 10 10.00 15.51 11.00
Insoluble Phosphoric Acid Guaranteed,	
Insoluble Phosphoric Acid in Official Sample.	6.00 3.26 2.00 1.15 6.00 3.24 2.00 1.15 5.00 2.77 2.00 1.56 8.00 3.82 2.00 0.87 12.00 2.49 2.00 0.87 7.00 3.70 2.00 1.38 6.00 5.03 2.00 1.93 8.00 3.60 2.00 0.70
Reverted Phosphoric Acid	6.00 3.26 2.00 1. 5.00 2.24 2.00 2. 5.00 2.77 2.00 1. 5.00 2.77 2.00 1. 7.00 2.79 2.00 0. 12.00 2.82 2.00 0. 12.00 5.03 2.00 1. 8.00 3.60 2.00 1.
Reverted Phosphoric Acid in Official Sample.	2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2
Soluble Phosphoric Acid	6.00 8 8 00 8 8 00 112.00 8 8 00 8 8 00 8 8 00 8 8 00 8 8 00 8 8 00 8 8 00 8 8 00 8 8 00 8 8 00 8 8 00 8 8 00 8 8 00 8 8 00 8
Soluble Phosphorle Acid in Official Sample.	6, 45 6, 14 4, 55 12, 15 113, 38
NAME OF BRAND.	Agricultural Chem-Bone Meal York and Baltimore Agricultural Chem-Bone Meal York and Baltimore Bone Prosphate with Potash Agricultural Chem-Bradley Fert. Works' Dissolved Agricultural Chem-Bradley Fert. Works' Nagara, 4,55,6,00,2,24 York and Baltimore Agricultural Chem-Bradley Fert. Works' Alkaline York and Baltimore Bradley Fert. Works' Alkaline Agricultural Chem-Bradley Fert. Works' Soluble 12,15,12,00,2,49 York and Baltimore Dissolved Bone Agricultural Chem-Bradley Fert. Works' Soluble 12,15,12,00,2,49 Agricultural Chem-Canton Chemical Baker's Spl. 4,45 York and Baltimore Canton Chemical Harrow Br'd Agricultural Chem-Canton Chemical Harrow Br'd Agricultural Chem-Canton Chemical Harrow Br'd Agricultural Chem-Canton Chemical Baker's Dis. 13,38
NAME AND ADDRESS OF MAN- UFACTURER.	The American Agricultural Chembone Bone Meal. The American Agricultural Chembone Bone Meal. The American Agricultural Chembone Bradley Fert. Works' Dissolved 6.45 6.00 3.36 2.00 I. ical Co., New York and Baltimore Bone Phosphate with Potash from Agricultural Chembone Bradley Fert. Works' Niagara, 4.55 5.00 2.77 2.00 I. real Co., New York and Baltimore Potato Pert. Works' Riagara, 4.55 5.00 2.77 2.00 I. real Co., New York and Baltimore Bradley Fert. Works' Alkaline 7.28 8.00 3.82 2.00 I. Bone Fore American Agricultural Chembone Bradley Fert. Works' Alkaline 7.28 8.00 3.62 2.00 I. real Co., New York and Baltimore Bradley Fert. Works' Soluble 12.15 12.00 2.49 2.00 I. leal Co., New York and Baltimore Bradley Fert. Works' Soluble 12.15 12.00 2.49 2.00 I. leal Co., New York and Baltimore Dissolved Bone Canton Chemical Baker's Spl. 4.45 7.00 8.70 2.00 I. leal Co., New York and Baltimore Canton Chemical Harrow Brid 2.78 6.00 5.08 2.00 II. Cail Co., New York and Baltimore Canton Chemical Soluble Bone 6.37 8.00 3.00 2.00 I. Cail Co., New York and Baltimore Canton Chemical Soluble Bone 6.37 8.00 3.00 2.00 I. Real Co., New York and Baltimore Canton Chemical Baker's Dis, 13.38 12.00 2.22 2.00 0. Ical Co., New York and Baltimore Ganton Chemical Baker's Dis, 13.38 12.00 2.22 2.00 0. Ical Co., New York and Baltimore Ganton Chemical Baker's Dis, 13.38 12.00 2.22 2.00 0. Ical Co., New York and Baltimore Ganton Chemical Baker's Dis, 13.38 12.00 2.22 2.00 0.

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Valuation According to Guaranteed Analysis,	28.00 16.75 16.50 12.50 20.25 17.75	8.75 6.50 8.50 1.50
Valuation of Official Sam-	10.63 10.00 9.72 9.00 2.26 2.47 4.08 2.00 25.50 25.00 12.42 11.00 11.50 10.00 1.08 0.82 2.13 1.00 20.50 16.75 15.00 15.51 15.00 11.50 10.00 3. 01 2.00 17.75 15.00 15.51 15.00 14.61 14.00 3. 01 2.00 17.75 15.00 12.55 11.00 14.75 10.00 17.25 16.50 12.50 10.77 9.00 8.77 8.00 1.66 1.65 8.96 8.00 20.50 20.50 20.51 12.52 12.52 12.50 1	7. 00 0. 84 0. 82 2. 22 1. 00 16.25 13.75 10.00 2. 69 2. 00 16.50 15.00 14.00 17.50 16.50 8. 00 0. 89 4. 74 4. 00 21.00 18.50 8. 00 1.97 2. 05 3. 04 3. 00 22.25 21 50
Potash Guaranteed.	4.08 2.00 25.50 2.13 1.00 20.50 8.01 2.00 17.75 	3.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Potash in Official Sample.	9.00 2.26 2.47 4.08 2.00 10.00 1.08 0.82 2.13 1.00 10.00 8.01 2.00 11.00 8.01 2.00 11.00 8.00 1.66 1.65 8.96 8.00 6.00 0.89 0.82 8.20 5.00 6.00 0.89 0.82 8.20 5.00	3. 04. 7. 4. 7. 8. 8. 9. 04. 8. 9. 04. 8. 9. 04. 8. 9. 04. 8. 9. 04. 8. 9. 04. 8. 9. 04. 8. 9. 04. 8. 9. 04. 8. 9. 04. 8. 9. 04.
Nitrogen Guaranteed.	0.82 0.82 0.82 0.82 0.82 0.82 0.82 0.82	7.00 0.84 0.82 2. 2. 10.00 2. 14.00 2. 48.00 0.90 0.82 4. 8. 00 11.97 2.05 8.
Nitrogen in Official Sample	2.26 1.08 0.89	0.90
Available Phosphoric Acid	72 9.00 13 10.00 50 10.00 61 14.00 75 10.00	7.00 10.00 14.00 8.00 8.00
Available Phosphoric Acid in Official Sample,	9.72 11.18 11.50 11.61 11.75 11.75 11.75 9.83	10.33 14.89 8.91 8.73
Total Phosphoric Acid Guaranteed.	10.63 10.00 9.72 9.00 12.83 11.00 11.60 10.00 12.51 15.00 14 61 11.00 12.58 11.00 11.51 10.00 12.58 12.00 8.57 8.00 12.55 7.00 9.88 6.00	9.01 S.00 7.42 7.00 11.83 11.00 10.83 10.00 15.81 15.00 14.89 14.00 10.07 8.91 8.00 9.80 8.73 8.00
Total Phosphoric Acid in Official Sample	10.63 10.00 12.42 11.00 12.33 11.00 12.58 11.00 10.77 9.00 12.52 7.00	9.01 11.83 15.81 10.07
Insoluble Phosphoric Acid		
In Official Sample.	00 0.91 00 0.83 00 0.83 00 0.83 00 0.83 00 0.83	00 1.52 00 0.92 00 0.92 00 1.16
Reverted Phosphoric Acid Guaranteed.	7. 00 4. 51 2. 00 0.91 8. 00 3. 33 2. 00 1. 23 8. 00 4. 25 2. 00 0. 83 12.00 2. 38 2. 00 0. 90 8. 00 5. 06 2. 00 0. 83 6. 00 2. 76 2. 00 2. 20 4. 00 2. 85 2. 00 2. 50	5.00 3.83 2.00 1.59 8.00 2.72 2.00 1.52 12.00 2.39 2.00 0.92 6.00 3.68 2.00 1.07 6.00 3.00 2.00 1.07
Reverted Phosphoric Acid in Official Sample.	7. 00 4. 51 12. 8. 00 3. 33 2. 8. 00 4. 26 2. 12. 02 2. 38 2. 12. 02 2. 38 2. 8. 00 5. 06 5. 06 2. 6. 00 2. 76 2. 4. 00 2. 85 2.	5.00 3.83 2. 8.00 2.72 2. 12.00 2.39 2. 6.00 3.00 3.
Soluble Phosphoric Acid		
Soluble Phosphate Acid in Official Sample.		3.59 7.61 12.50 5.23 5.73
	Buckeye Buckeye Cleveland Dryer Phospho Bone Cleveland Dryer Horsehead Phosphate with Potash Cleveland Dryer Horsehead Phosphate With Potash phate phate Dryer Horsehead phosphate Detrick's Kangaroo Komplete Kompound	hos- one ser
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NAME OF BRAND	Buckeye Buckeye Buckeye Buckeye Buckeye Cleveland Dryer Phospho Bone Cleveland Dryer Horsehead Phosphate with Potash Cleveland Dryer KXX Phosphate Butter Horsehead Dryer Horsehead Dryer Horsehead Dryer Horsehead Detrick's Kangaroo Komplete Kompound	Derrick's Paragon Amm'rd Bone Phos and Potash Detrick's Soluble Bone Phos- phate and Potash Detrick's Dissolved S. C. Bone Great Eastern Corn Fertilizer Great Eastern Vegetable, Vine and Tobacco
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Valuation According to Guaranteed Sample.	19.00	16.00	15.00	16.00	16.00	43.00	15.00	16,50	16.00	50 20.50	15.00	16.50
Valuation of Official Sam-	2.00 2.00 20.50 19.00	82 2, 50 2, 00 17, 50 16,00	2.00 17.25 15.00	17.50 16.00	3.18 2.00 18.25 16.00	1.06 0.82 1.97 1.00 17.75 43.00	3, 11 2, 00 18,00 15,00	17.25 16.50	2,00 19.75.16.00	22	2.00 17.75 15.00	18.50 16.50
Potash Guaranteed.	2,00	2.00	2.00	:	2.00	1.00	2.00	1	2,00	5,00	2.00	:
Potash in Official sample.	2.00	2,50	2.08	:	3,18	1.97	3, 11	:	0,71 0,82 2,53	. 85	2,52	:
Nitrogen Guaranteed.	1.64	0.82	:		0.82	0.85	:		0.82	:	:	
Nitrogen in Official Sample.	-1	8.00 0.95 0.		:	0,95 0.82				0.71			
Available Phosphoric Acid Guaranteed.	8.00		10.00	14.86 14.00	3.00	7.00	10.00	14.00	8.00	15.00	10 01	2 14.00
Available Phosphoric Acid in Official Sample,	8,88	8,15	12.05	14.86	8, 13	8, 59	11.69	14.64	9,00 11,31	11,5	11.48	15, 2
Total Fhosphoric Acid Guaranteed,		:	:		9.00	8.00	12.45 11.00 11.63 10.00	15.54 15.00 14.64 14.00		12.37 13.00 11.53 12.00	14.46 11.00 11.45 10 00	15.00
Total Phosphoric Acid in Official Sample.	10.84	8.90	12.98	16.40	8.96	10 21	12,45	15.54	12.49	12.37	14.46	16.44 15.00 15.
Insoluble Phosphoric Acid Guaranteed.	:	- :	:		:	:	:	:	:	:	:	
Insoluble Phosphoric Acid in Official Sample.	1.96	0.75	0.93	1.54	0.83	1,62	0.82	0.90	1.18	0.84	3.0	0.5
Reverted Phosphoric Acid Guaranteed.	2.0	2.00	2.00	2.00	2.00	2.00	2,00	2.00	2.0	2.00	2.00	2.00
Reverted Phosphoric Acid in Official Sample	3.87	1.78	3, 53	1.25	3, 73	3.89	4.48	2,59	3,02	4.57	5.00	2, 62
Soluble Phosphoric Acid Guaranteed	00.9	6.00	8.00		6.00	5.00	8.00	2.00	6.00	00.00	8.00	12.00
Soluble Phosphoric cid in Official Sample.	4.91	6.87	8,47	13.61 12 00	4.40	4.70	7.15	12.05 12.00	8.29	6.96 10.00	6, 39	phate Maryland Dissolved S. C. Bone 13.30
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o d	Great Eastern wheat Special.	Great Eastern English Wheat	Soluble Bone	and Potash Great Eastern Dissolved Bone.	Lazaretto Ammoniated Bone	Phosphate Lazaretto Excelsior AAA	Bo	Bo	Maryland O. K. Ammoniated	Fertilizer Maryland Tornado Fertilizer	Superphos.	C. B
NAME OF BRAND.	t Si	lish	able	lvec	atec	AA	pe.	ed	omo	Fer	dng	oci m
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Valuation According to Guaranteed Analysis.	19.25	16.75	13.75	15.00	.25 16 50	13.75	16.50	15.00	14.75	16.50	19.25	8.001.22 1.08 3.66 2.00 21.50 16.75
Valuation of Official Sam- ple,	24;50 19.25	8.00 1.24 1.03 3.24 2.00 21.00 16.75	7.00 1.08 0.82 2.09 1.00 18.00 13.75	3.03 2.00 18.00 15.00	17.25	02 1.00 16.50 13.75	17.50 16.50	00 16.25 15.00	8.00 1.22 0.82 2.13 1.00 18.25 14.75	19.25 16.50	5,00 24,00 19.25	21.50
Potash Guaranteed.	5.00	2.00	1.00	2.00		1.00	:	2.00	1.00		5.00	2.00
Potash in Official Sample.	7.19 5.00	8.24	2.09	3.03	:	2.05	:	2.04	2, 13	:	7.34	3.66
Nitrogen Guaranteed,	24	1.03	0.85	:	:	7.00 1.04 0.82 2.	:	:	0.85	1	1.24	1.03
Nitrogen in Official Sample	6.001.501.	1,24	1.08	:	:	1.04	:	:	1.22	:	6.00 1.39 1.24	1.22
Available Phosphoric Acid Guaranteed.	6.00	8.00		10.00	14,00		14.00	10.00		14.00	6.00	
Available Phosphoric Acid in Official Sample.	7.39	9.71	8,56	42 11.00 11.54 10.00	15.49 15 00 14.65 14,00	8:55	15.65 15 00 14.82 14.00	11.95 11.00 10.90 10.00	9.25	17.09 15.00 16.81 14.00	7.28	9.67
Total Phosphoric Acid Guaranteed,	7.00	9.00	8.00	11.00	15 00	8,00	15.00	11.00	00 6	15.00	2.00	9.00
Total Phosphoric Acid in Official Sample.	8.52	10.95	10.17	12,42	5.49	10.14	5.65	1.95	12.22	7.09	8, 43	10.91
Insoluble Phosphoric Acid Guaranteed.	:	:	:	:		:		:	:		:	:
Insoluble Phosphoric Acid in Official Sample.	1.13	1.24	00 1.61	00 0.88	0.84	00 1.59	00 0.83	1.05	2.97	0.28	1.15	1.24
Reverted Phosphoric Acid Guaranteed.	2.00	90	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Reverted Phosphoric Acid in Official Sample.	1.76	3.48 2.	3, 63	4.00 2.	2.55	3.62 2.	55	2. 73 2.	67	1.65	2.00	3.27
Soluble Phosphoric Acid Guaranteed.	4.00 1.76 2.00 1.13	6.003.	5,00 3,63 2.	8.00	12.00	5.00	12.00	8.00	6.00 2.	12.00	4.00 2.00 2.00 1.15	6.00 3.27 2.00 1.24
Soluble Phosphoric Acid in Official Sample.	5,63	6.23	4.93	7.54	12,10 12,00 2, 55 2, 00 0,84	4.93	12,24 12.00 2.	8.17	6.58	Superior Rock 15.16 12.00 1.65 2.00 0.28	5.28	Williams & Clark's Royal Bone 6.40 Phosphate
*	1	:	:	and	Potash Pacific Dissolved Bone Phos- phate.	-pu	Elm	Alkaline Bone	Phos.	ock	Good	one
AD.	rte.		ate.		P	John S. Reese & Co.'s Half-and-		ne B	P	or B		al B
NAME AND BRAND	Pacific Potato Phosphate	Pacific Nobsque Guano.	Pacific A No. 1 Phosphate.	Bone	30n	B S	Co.'8	allir	XXV	perio	Clark's	Roy
D.B	hos	Gu	Pho		ed 1	Co.	3	Alk	X.	Sul	Cla	rk's
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3	ota	sqo	No	Dis	Diss	Rees	Reate	ann	ann	annate		sk
(A)	le F	ic N	le A	ic,	ic ic te.	wi.	S. S.	ueh	neh	neh	am	am
A	acif	acif	acit	Pacific Dissolved	Potash acific phate.	ohn	Hall John S. R. Phosphate	Susquebannah	Susquehannah	pnate Susquebannah Phosphate	Williams	Villiam Phosph
	1					-	73					
MAN	The American Agricultural Chem-	ical Co.; New York and Baltimore The American Agricultural Chem-	ical Co. New York and Baltimore The American Agricultural Chem-	ical Co., New York and Baltimore The American Agricultural Chem-	ical Co New York and Baltimore he American Agricultural Chemical Co., New York and Baltimore	The American Agricultural Chem-	Ical Co., New York and Baldmore The American Agricultural Chemical Co., New York and Baltimore	The American Agricultural Chem-	he American Agricultural Chem-	Agricultural Chem- York and Baltimore	Agricultural Chem-	Agricultural Chem- York and Baltimore
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ESK	icu	k an	ieul	k ar	iculicul k al	icu	k an	nen	icu	icul k aı	deu	k an
ND ADDRESS UFACTURER	Agr	Agr	Agr	Yor	You Agn Yor	Agr	Agr	Agi	Agi	Agr	Ag	Agr
AI	an	an	an	an	an	an	an	an	an		an	an
UND	eric	erica	eric	erice	eric ; N	eric	eric	eric	eric	eric	eric	eric
E	Am	Ann	Am	A Co	ical Co New ne American ical Co., New	Ann	Control	Am	Am	he American ical Co., New	Am	The American ical Co., New
NAME AND ADDRESS OF UFACTURER.	,he	he.	lea be	ica The	Ical Co New The American ical Co., New	The	The ica	he	The American	Ical Co., New The American Ical Co., New	The American	he

Available Phosporie Acid in Official Sample. Available Phosphorie Acid Guaranteed Nitrogen in Official Sample. Potash in Official Sample. Potash in Official Sample. Potash in Official Sample. Potash in Official Sample. Valuation of Official Sample. Valuation According to Sustanteed Analysis,	8.39 7.00 1.03 0.82 2.82 1.00 18.25 18.75 11.07 10.00 2.88 2.00 18.25 18.50 14.63 14.00 2.85 2.00 18.75 16.50 8.85 8.00 0.97 0.82 2.85 2.00 18.75 16.00 7.39 7.00 0.97 0.82 1.92 1.00 16.75 18.75 10.26 10.00 3.00 2.00 16.75 14.50 12.39 12.00 3.00 2.00 16.75 14.50 12.39 12.00 3.00 2.00 17.51 14.50 12.39 12.00 2.54 2.47 25.75 24.50 4.06 3.70 25.76 24.50 4.06 3.70 25.00 28.00 15.50 1.02
Graranteed. Insoluble Phosphorie Acid in Official Sample. Insoluble Phosphorie Acid Graranteed. Total Phosphorie Acid in Official Sample. Total Phosphorie Acid in Cofficial Sample.	10.27 S.00 12.41 11.00 15.49 15.00 16.08 15.00 17.08 15.00 18.16 13.00 18.16 13.00 19.86 9.00 19.86 9.00 19.86 9.00 19.86 9.00 19.86 9.00 11.10 10.00 11.10 10.00 18.25 8.00
Soluble Phosphoric Acid an Official Sample. Soluble Phosphoric Acid Guaranteed. Beverted Phosphoric Acid in Official Sample. in Official Sample.	4,61 5.00 3.95 7,41 8.00 4.26 12.01 12.00 2.63 6,91 6.00 1.94 5,55 5.00 2.44 6,29 8.00 3.97 11.02 12.00 2.41 10.11 10.00 2.28 6.77 6,00 1.98 4,12 3.21
NAME OF BRAND.	Williams & Clark's Crop Producer Producer Rona and Potlash Williams & Clark's Bone and Posphate Acid Phosphate Zell's Economizor Zell's Electric Phosph Zell's Dissolved Bozell's Dissolved Bozell's Dissolved S. C. Zell's Ammoniated Perphosphate Bone Meal Bone Meal Grain Grower.
NAME AND ADDRESS OF MAN.	The American Agricultural Chemical Co., New York and Baltimore The American Agricultural Chemical Co., New York and Baltimore The American Agricultural Chemical Co., New York and Baltimore The American Agricultural Chemical Co., New York and Baltimore The American Agricultural Chemical Co., New York and Baltimore The American Agricultural Chemical Co., New York and Baltimore The American Agricultural Chemical Co., New York and Baltimore The American Agricultural Chemical Co., New York and Baltimore The American Agricultural Chemical Co., New York and Baltimore The American Agricultural Chemical Co., New York and Baltimore The American Agricultural Chemical Co., New York and Baltimore Armour Fertilizer Works, Chicago. Armour Fertilizer Works, Chicago.

WEST VIRGIN	IIA	EX	PE.	RIM	IEN	T	STA	TIO	N.						
Valuation According to Guaranteed Analysis,	16.50	13.00	16.50	15.00	22.75	17.75	25,26.00	.4.75	.75 19.00	02.91	00.61	17.00	15,50	75 12.50	13.75
Valuation of Official Sam- ple,	19.25	15.25 13.00	17.75 16.50	17.00 15.00	26.75	20.50 17.75	26 25	50 1.00 19.25 .4.75	21.75	17.50 16.30	22.25 19.00	75 3, 18 3, 00, 19, 00, 17, 00	1.00 18.25 15.50	13.75	
Potash (inaranteed,	-=	2.00	 :	00.5	:	1.00:	:	1.00	2.0021	:	8	3.00	1.00.1	:	1.00-1
Potash in Official Sample.	:	5.0]	:	80	:	5.00 1.82 1.65 1.39 1.00	:	2.30	2.1	- :	5 T	3, 18	75 1.57	:	1.38
Nitrogen Guaranteed.	:	:	:	:	10 i	1.65	× + ::	0.85	1.96 1.65 2.	:	00 1.65 2.	0.75		:	
Mitrogen in Official Sample	:	:		:	2.17	55	. 55 . 55	8.00 1.40 0.82 2.	1.96	:	90	S. 00 0.83 0.	9.00 1.05 0.		
Available Phosphoric Acid Guaranteed,	11.00	00.5	11,00	10.00	13.00	00%	:		8.8	11.00	-		9.00	10 00	10.00
Available Phosphoric Acid in Official Sample.	16.83	10.01	11.99 11.00	10,79 10,00	18.31 16 00 16.19 18.00 2.17	9,05	:	8.16	5.	11.63 11.00	£	8,46	9.31	13,27 11,00 10,31 10 00	13.21 11.00 10.17 10.00
Total Phosphoric Acid	17.74 16.00	:	:	:	16 00	:	21.50	:	11.15 11.00		:	9,00	11.78 10.00	11.00	11.00
Total Phosphoric Acid in Official Sample.	17.74	11.04	16.09	12.26	18.81	11.13	20,35 21,50	9,81	11.15	16.23	11.00	11.25	11.78	13,27	13.21
Insoluble Phosphoric acid	:	:	:	:	:	:	:	:	:	:	:	:	:	:	
Insoluble Phosphoric Acid in Official Sample,	0.91	0.56	1. 10	1.4	2, 12	SO:	:	1.65	2.21	1.60	2, 11	2.79	2.41	2.93	E ci
Reverted Phosphoric Acid Guaranteed,	:		:	:	:	:	:	:	:	:	:	:	:	:	
Reverted Phosphoric Acid in Official Sample.	6.79	6,05	1. 19	21	12.94	3.56	1	2.06	3.51	ei E	9:38	4,88	4.6	5.67	ŭ.43
Soluble Phosphoric Acid	:	:	:	:		:	:		:	:	:	:	:	:	
Soluble Phosphoric Acid	10.01	8.99	10.50	S. 51	01	5,49	:	6.10	5,40	12.55	5.00	3,58	71	4.67	5.04
NAME OF BRAND.	Star Phosphate	Special Spring and Fall Mix	Dissolved S. C. Bone	Soluble Alkaline Superphos	Dissolved Animal Bones, War	ranted Fure. Donble Eagle Phosphate	. Warranted Pure Bone Meal	General Crop Grower	Animal Bone and Pot. Comp	H.Gr.A. Phos. or Dis. S. C. Rock	Wheat Fertilizer.	Fish Guano.	Harvest Bone	Dissolved Bone Phosphate	N. J Dissolved Bone with Potash
NAME AND ADDRESS OF MAN- UFACTURER.	Armour Fertilizer Works, Chicago.	Baltimore Pulverlzing Co., Balti	Baltimore Pulverizing Co., Balti	Baugh & Sons Co., Baltimore	Baugh & Sons Co., Baltimore	Baugh & Sons Co., Baltimore	Baugh & Sons Co., Ba. more	Baugh & Sons Co., Ba inorc	Baugh & Sons Co., Baltimore	Baugh & Sons Co., Baltimore	Baugh & Sons Co., Baltimore	Bowker Fert, Co., Elizabeth, N. J	Bowker Fert. Co., Elizabeth, N. J	Bowker Fert. Co., Elizabeth, N. J	Bowker Fert. Co., Elizabeth, N. J

Guaranteed Analysis	. 0	25				0	0	2	0	0	Q	ž.	ĬŌ.	ř.	
ot gainston According to	16.50	19.	:	:	, :	17.25 16.50	1,00 18,25 14,50	1,00 18.25 13.75	19,00 16.50	00/18.75 17.00	75 16.50	5 22.25	89 0.50 12.25 10.75	16.75 16.75	5 19.
Valuation of Official Sam- ples.	17.75	20.25	26.00	11.25	25.75	17.2	18.2	18.25	19.00	18.7	16 78	25.75	12.2	16.7	20.5
Potash Guaranteed.	:	:	:	:	:	:	1.00	1,00	:	1.00	:	:	0,50	:	2.00
Potash in Official Sample.	:	:	3, 63	:	3,96	:	2,55	2, 25	:	1.31	:	:	Ö	:	2,80
Nitrogen Guaranteed.		1.50	:	:	:	:	0.82	:	:	98	:	2,50	0,40	:	1,66
Nitrogen in Official Sample	:	1.75	2,45	:	2,65	:	1.04	:	:	0,95	:	2,64	0.50	;	1.82
Available Phosphoric Acid Guaranteed.	14 00	:	:	:	:	14.00	8.00 1.04	10.00	14.00	13.79 11.00 10.49 10.00 0.95 0.	14.00	:	6.00 0.50 0.	14.00	8.00 1.82 1.66 2.80 2.00 20.25 19.
Available Phosphoric Acid in Official Sample.	15.04	:	9,85	8.27	8,44	16.00 13.35 14.00	8,46	12.19	16.53 14.00	10,49	15.00 13.53		6, 10	14.18	7.60
Total Phosphoric Acid Guaranteed.	15.00 15.04 14 00	55,20.00	:	:	:	16.00	9.00	13.20 11.00 12.	15.00	11.00	15.00	20.00	7.00		9.90[10.00]
Total Phosphoric Acid in (Official Sample,	16.46	20.551	11.35	9,61	9,98	19.23	10,11	13,20	17,44	13.79	16.57	25.35	7.78	15.00	
Insoluble Phosphoric Acid Guaranteed.	:	-	:	:	:	:	:	- - :	:	:	:	:	:	1.00	:
Insoluble Phosphoric Acid in Official Sample	1.42	:	1.48	1,34	ا. الا	5,88	1,65	1.01	0,91	3,30	3,04	:	1,68	0.82	2.30
Reverted Phosphoric Acid Guaranteed.	:		:	:	:	6,00	2.00	2.00	2.00 0.	:	:		:	:	2.00
Reverted Phosphoric Acid in Official Sample.	3,55	:	3,51	5.00	2.94	2, 59	4.32	3.07	10	2, 33	2, 20	:	2, 32	2,90	1.89
Soluble Phosphoric Acid		:	:	:	:	8.00	6.00	8,00	12.00 2.	:	-	:	:	:	6.00 1.89 2.00 2.30
in Official Sample.	9.	:	6.36	. 27	- <u>.</u>	10.76	4.14	-21	14.53 1	. 16	11.33	:	78	28	5.71
Soluble Phosphoric Acid	===	-:		• 9			4		14	∞ <u>.</u>	= :	:	ණ :	=	te 5
		:					: :	:		:				hos	Superphosphate
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OFB	:		and Po	Phosp	al	Bone	ne Ph	ospha		Pish	phate	d)		lved E	
IES OF B	30ne	al	ood and Po	sant Phospl	pecial	C. Bone	Bone Ph	Phospha	3one	One Fish	hosphate	Bone	tillize	issolved E	
NAMES OF B	ole Bone	Meal	, Blood and Potash	Peasant Phosp	at Special		tone Bone Ph	eror Phospha	ble Bone	ther One Fish	D. Phosphate	ınd Bone	Fertilize	's Dissolved B	
NAMES OF BRAND.	Soluble Bone	Bone Meal	Bone, Blood and Po	Mt. Pleasant Phospl	Wheat Special		Keystone Bone Ph	Emperor Phospha	Soluble Bone	Number One Fish	C. O. D. Phosphate	Ground Bone	O. K. Fertilize	Ruth's Dissolved B	
	J Soluble Bone	J Bone Meal	Bone, Blood and Po	Mt. Pleasant Phosphate	Wheat Special	King's S.	Keystone Bone Phosphate	Emperor Phosphate	Soluble Bone	O. Number One Fish Guano	O. C. O. D. Phosphate	O. Ground Bone	O. K. Fertilize	ore Ruth's Dissolved Bone Phos.	Garden City Horseshoe Br
	J	N. J.:	Bone, Blood and Po	Mt. Pleasant Phosp	Wheat Special	King's S.	:	-	:						Garden City Horseshoe Br
	J	N. J.:	Bone,	•		King's S.	:	-	:						Garden City Horseshoe Br
	J	N. J.:	Bone,	•		King's S.	:	-	:						Garden City Horseshoe Br
	J	Elizabeth, N. J	Bone,	•		King's S.	Philadelphia	Philadelphia.	Philadelphia						Garden City Horseshoe Br
ADDRESS OF MAN-	J	Co., Elizabeth, N. J	Bone,	•		King's S.	Philadelphia	Philadelphia.	Philadelphia						
ADDRESS OF MAN-	J	Co., Elizabeth, N. J	Bone,	•		King's S.	Philadelphia	Philadelphia.	Philadelphia						Fert. Co., Chicago Garden City.
AND ADDRESS OF MAN- UFACTURER.	J	Co., Elizabeth, N. J	Bone,	•		King's S.	S. M., & Bro., Philadelphia	S. M., & Bro., Philadelphia.	S. M., & Bro., Philadelphia						Fert. Co., Chicago Garden City.
ADDRESS OF MAN-	:	Elizabeth, N. J	Uhicago Fert. Co., Chicago Bone, Blood and Po	Chicago Fert. Co., Chicago Mt. Pleasant Phospi			M., & Bro., Philadelphia	M., & Bro., Philadelphia.	M., & Bro., Philadelphia	Jarecki Chemical Co., Sandusky, O. Number One Fish	Jarecki Chemical Co., Sandusky, O. C. O. D. Phosphate	Jarecki Chemical Co., Sandusky, O. Ground Bone	Jarecki Chemical Co., Sandusky, O. K. Fertllize	Lazaretto Guano Works, Baltimore Ruth's Dissolved B	Garden City Horseshoe Br

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Valuation According to Guaranteed Analysis.	20 26	16.75	50 17.00	17.00	11.50	18,00	14.75	17.50	00,12,00	25 14.25	50 17.00	25 17.00	16.50	2,47 1,00 18.25 14.75
Valuation of Official Sam- ple.	24.00	20.75	19.50	18.25	15.00	22.50	19.50	1.05 2.00 25.75 17.50	16.00	16 25	20.50	20.25	17.50	8.25
Potash Guaranteed.	2.002	2.00	2.001	-	-	2,00	8	2.00.2	2.001	1.00.1	3.00 5	1.50	-	
Potash in Official Sample.	2.55	2.93	4.34	:	:	8.24	3.911.	1.05	2.46	1.75	3.65	£	:	2.47
Nitrogen Guaranteed.	1.75	75	*	:	:	:	0.82	1.24	:	:	1.30	25	:	0.82
Nitrogen in Official Sample	1.86	9.00 1.19 0.	*	:	:	:	0.90 0.	2, 69 1.	:	:	1,57	1.25 1.	:	8.00 1.33 0.82
Available Phosphoric Acid Guaranteed.	9.00		11 00	14.00	9,00	8.00	8.000.	8.002.	10.00	10.50	6.00	8.001	14.00	
Available Phosphoric Acid in Official Sample.	10.59	10.08	11.62	15.78	12,03	9, 79	00°	8.15	9.05	11.00	7. 45	9,56	14 55	7,57
Total Phosphoric Acid Guatanteed.	11.00	11.00	13.00 11	16.00 15.78	10.00 12	10.00	10.00	10.00			:	:	:	9.00
Total Thosphoric Acid in Official Supply.	11.55 11.00	11.08	11.88	16.06	13,57	11.15 10.00	9,34	98.6	11.74	13 23	9.08	15.58	17.25	8.79
Insoluble Phosphoric Acid Guaranteed.	;		:	:	:	:		:	:	:	:	:	:	;
Insoluble Phosphoric Acid in Official Sample.	0.96	1.00	0.26	0.28	1.51	1.36	1.01	1.67	3.	2.23	1.60	6.02	2, 70	1.22
Reverted Phosphoric Acid	2.00	00 i	2.00	3,00	3,00	2.00	2.00	2.00	:	:	:	:	:	1.00 1.
Reverted Phosphoric Acid in Official Sample,	1.94	0.86	1.71	1.8	5	2.26	2.31	3.0	6i	3.42	2, 28	4.59	1,74	2.20
Soluble Phosphoric Acid Guaranteed.	7.00	7.00	9.00	11.00	6.00.2	6.00	6.00	6.00	:					7.00
soluble Phosphoric Acid in Official Sample.	8.65	81	9,91	13,93	9,24	7.5	5,99	6.00	7.10	7.53	5, 20	4.97	12 81	5,37
NAME OF BRAND.	Farmers' Standard Ammot'ed	Farmers' Mixture	Diss. Bone Phos. and Potash	Dissolved Bone Phosphate	Acid Phosphate	Soluble Bone and Potash	General Crop Fish Guano	Corn, Oats & Wheat Fish Guano	Farmers' H. Gr. Bone and Pot.	Dis. Bone Phos. Potash Goods.	Royal Am. Bone and Potash	Pure Raw Bone Mixture	High Grade S. C. Bone	Wm. Penn Crop Grower
NAME AND ADDRESS OF MAN	Ober, G., & Sons Co., Baltlmore	Ober, G., & Sons Co., Baltimore	Ober, G., & Sons Co., Baltimore	Ober, G., & Sons Co., Baltimore	Obio Farmers' Fert. Co., Columbus, C	Ohio Farmers' Fert. Co., Columbus, C	Ohio Farmers'Fert, Co., Columbus,	Ohio Farmers' Fert. Co., Columbus, C	Piedmont-Mt. Airy Guano Co., Balto	Piedmont-Mt. Airy Guano Co., Balto	Pledmont-Mt. Airy Guano Co., Balto	Piedmont-Mt. Airy (Huano Co, Balto	Pledmont-Mt.Airy Guano Co., Balto	Rasin-Monumental Co., Baltlmore.

Valuation According to Guaranteed Annalysis,	17.75	15,00	25 16.50	1.00 18 26 14.75	19.50 16.00	18,50 16,50	25.00	25.75 19.00	23,00,19.50	75 15.50	35,00 30,25	30.00	00 19.00 17.25	85 5.00 30.00 29.00
Valuation of Official Sam- ple,	20.26	20.25	18.25	18 26	19,50	18,50	26 50	25.75	23.00	18.75	35,00	30,25	19.00	30,00
Potash Guaranteed.	8	2.00	:	1.00	2.00	:	3.00	2.00	2.00	1.00	5.00	3.00	2.00	5.00
Potash in Official Sample.	3,151	3,23	:	1.44	39	:	3, 35	2.34	96	2.10	7,24	4.06	2.03	ကိ
Nitrogen Guaranteed.	1.64	:	:	0.82	0.82 2.	:	47	1.64	1.75 2.	1.00	3,25	4.75		2,50
Nitrogen in Official Sample	8.00 1.76 1.64	:	:	1.24 0.	26	:	2.692.	2, 47	2.09	1,26	3.52	4,96	:	2,54
Available Phosphoric Acid. Guaranteed.		44/10.00	14.00	8.001.	8.001	14.00	10.00	8, 60	8,00	8.00	10.00		12.00	
Available Phosphoric Acid in Official Sample,	8.48	13,44	15.74	9.05	9.27	15.76 14.00	10.07	10.31	8,96	8,62	10.74		13,93	
Total Phosphoric Acid Guaranteed,	9.00	11.00 13.	15.00	:	:	:	3.00	12.00 10.31	12,00	1,00	1.00	0.00	3.00	3.50
Total Phosphoric Acid in Official Sample.	9,35	13,82	16.30 15.00 15.74 14.00	10,15	10.20	17.30	10.73 13.00	15.08	10.52	11.00 11.00	11.64 11.00 10.74	14,85	15.06 13.00 13.93	25.01 23.50
Insoluble Phosphoric Acid Guaranteed,		:	:	:	:	:	:	:	:	:	:	:	:	:
Insoluble Phosphoric Acid in Official Sample,	0.87	0,38	0,56	1,10	0.93	1,63	0,66	4.77	1,56	2,38	0.90	:	1,13	:
Reverted Phosphoric Acid Guaranteed.	1.00	1.50 0.	2.00	2.00	2.00 0.	4.00 1.63	:	:	:	:	:	:	:	:
Reverted Phosphoric Acid in Official Sample.	2.06	2,44 1.	0,63	2,57	2,69	3.53	2.00	3,90	3, 22	2.67	3,68	:	6,36	:
Soluble Phosphoric Acid Guaranteed.	7.00	8,50	12.00 0.	6.00	6.00	10.00		:	:	:			:	
Soluble Phosphoric Acid in Official Sample,	6.42	11.00	15.11	6, 48	6,58	12.23 10.00	7.98	6,41	5.74	5,95	2:08	. :	7.57	
NAME OF BRAND.	Rasin's Empire Guano	Rasin's Bone & Potash Fert	Rasin's Acid Phosphate	Bone Mixture	Premium Wheat Grower	High Grade Acid Phosphate	Special Tobacco Fertilizer	Ammonia Bone and Potash	Superphosphate	Complete Fertilizer	Potato and Tobacco Grower	Ammoniated Bone and Potash	Phosphate and Potash	Bone and Potash
NAME AND ADDRESS OF MAN. UFACTURER.	Rasin-Monumental Co., Baltimore.	Rasin-Monumental Co., Baltimore.	Rasin-Monumental Co., Baltimore.	Richmond Guano Co., Richmond	Richmond Guano Co., Richmond	Richmond Guano Co., Richmond	Swift & Co., Chicago	Swift & Co., Chicago	Swift & Co., Chicago	Swift & Co., Chicago	Swift & Co., Chicago	Swift & Co., Chicago	Swift & Co., Chicago	Swift & Co., Chicago

Guaranteed Analysis.	27.50	00	Si Si	00	55	7.5	90	.50	12	13	8	00.	16.50	00	98
ple.	5	.75 12.50	28,50 25,25	19,25,18,50	1000 39,25 35,25	20.75 17.75	2,00 19,25 16,00	25 11.50	75 17.75	17.00 11.75	16.00 15.00	15,50 14,50	17.50 16	23.25 19.00	21.00 91.50
Potash Guaranteed. Valuation of Official Sam-	- 31	: = :	eg .	61 :	00 39.	1.00 20	00 19		1.00 21	1.00 17.	00 16	: 15	:	65	1.00.21
Potash in Official Sample.	:	:-	-:-	- :	278 10		00 2.	:	90.1.	1.77 1.	50 67		:	80 2.00	4.83.1.
Nitrogen Guaranteed.	13	-	00:		21 52	61 1.	% %	:	64 1.	% T	oi :	- :	:	612.	3d
Nitrogen in Official Sample	963.		S	:	30,3	.S.	93.0	:	68.1.	95.0.		:	-:-	.161.	20 0.
Available Phosphoric Acid Guaranteed.	_ 20	00.01	oi :	. 00.91	9,003,303,25 1278	8.00 1.85 1.64 1.67	8,00,0.93 0.82 3.00	00.51	8,00 2,03 1,64 1,90	8.00 0.95 0.82	10,00	12.00	11.00	8.00 2.16	9.00
Available Phosphorte Acid in Official Sample.		9,03 10.00	- :	16,80	9, 25	13	9, 21	12.09 12.00	9.25	8,66	10.51		11.99	8.93	10.89
Total Phosphoric Acid Guaranteed.	23.00	11.00	25,66 25,00	17.00 16.80 16.00	10.02 10.00	:			9.00	9.00	10.82 11.00 10.51	13.62 13.00 12.81	15.45 15.00 14.99 11.00	9.00	12.29 10.00 10.89
Total Phosphoric Acid in Official Sample.	23,52,23,00	9.59	25,66	17.71	10.02	12.00	11.03	11.16	10.10	9.59	10.82	13.62	15.45	11.62	12.29
Insoluble Phosphoric Acid			:	:_	:	:	:	:	:	.:	:	:	_:	:	
Insoluble Phosphoric Acid in Official sample.	:	0.55		0.91	0.77	3,25	1. %	2.37	00 1.15	0.93	0.28	0.78	0.46	2.69	4.25 3.41 4.75 1.40
Reverted Phosphoric Acid		:	:	_:	:		:-		oi	9.00	80:	3.00	2:00	4.25	4.75
Reverted Phosphoric Acid in Official Sample.		7 2		5.80	£.28	69 21	% _si_	3.70	2.60	00 2.43	00 3.51	. S.	2.00	75 3.27	3.41
Soluble Phosphoric Acid			:		_ :		_:		6,00 2.	6.00	X	9.003.	11.00	00	
Soluble Phosphoric Acid in Official Sample.		6.59	:	11.00	1.97	6,53	6,36	8.35	6.65	6.23	7.00	9.05	12.90 11.00 2.	5,66	7.48
NAME OF BRAND.	. Raw Bone Meal	. Diamond <s> Phosphate</s>	Bone Meal	Pure Acid Phosphate	. Vegetable Grower		- 4	~	Acid Phosphate S. W. Travers' Beef Blood and	Bone Fert, S. W. Travers' Champion Corn	Grower S. W. Travers' Capital Bone &	Potash Compound S. W. Travers' Capital Dissol'd	S. C. Bone S. W. Travers' Dissolved Bone	Phosphate Four Fold	Grain King
NAME AND ADDRESS OF MAN	Swift & Co., Chicago.	Swift & Co., Chicago	Swift & Co., Chicago	Swift & Co., Chicago	Swift & Co., Chicago	Virginia-Carolina Chem. Co., Rieh-		mond, va. Virginia-Carolina Chem. Co., Rich-	mond, Va. Virginia Carolina Chem. Co., Rich	mond, Va. Virginia-Carolina Chem. Co., Rich-	mond, Va. Virginia-Carolina Chem. Co., Rich-	mond, Va. Virginia-Carolina Chem. Co., Rieb-	mond, Va. Virginia-Carolina Chem. Co., Rich-	mond, Va. Walker, Startman & Co., Pittsburg	Walker, Stratman & Co., Pittsburg.

Valuation According to Guaranteed Analysis,	.25	27.00	007	.50	00	.00	.50	.25	.50	99.	00.	.75	00.	90.	20.00
Valuation of Official Sample.	27.00 22.	32,25 27	31.75 32.60	28.00 25.50	27,00 22,00	2.00 17.75 15.00	17.50 14.50	20.75 22.25	18.75 16.50	00 16.50 15.00	28 3.00 19.25 18.00	1.00 18.00 14.75	2,00 18,76 17,00	21.00 19.00	1.75 20
Potash Guaranteed,	4.002		8.003	_21 	34	00	- 1	<u>.:</u>	=======================================	00	00	00	00	2.00 21	8.00 1.37 1.24 4.26 4.00 21.75
Potash in Official Sample.	5,044.	7.90 6.00	90	- :	<u>:</u> :	11	-:	-:	:	10 2.	28 3.	1,61 1.	60 2.	43 2.	26 4.
Nitrogen Guaranteed,	1,64 5,	50 7.	25 8.	25		<u>ci</u>		12	· :	<u>ci</u>	+	32 1.	82 2.	c/i	4.
	17 1.	89 2, 50	93.	೧೧	4, 31 3, 25	:	_:	00	ø:	:	:	11 0.82	03 0.8	64 1.64	7.1.5
Nitrogen in Official Sample	0.5.1	ား	8, 00 3, 49 3,	. 3, 67	4.	.:	:	3.0	<u>:</u>	_:		,—i	1.0	1.6	1.3
Available Pposphoric Acid	9.00 2.	8,00		:	:	10.01	12.0		14.0	10.00	12.00	8.00	9,00 1.	8.00 I.	
Available Phosphoric Acid in Official Sample.	9.78	8,55	s. 12	:	- :	11.79	15,11	:	16.30^{1} 14.00	11.32	11.42	8.98	8.82	9.17	8.80
Total Phosphoric Acid	10.00	9.00	9.00	3.00	6.00	12 15 11.00 11.79 10.00	13.00 15.11 12.00	17.00	:	-			:	:	:
Official Sample.	Ğ1	13.00.E1	11.02	23.92 22.	.49 16.00	151	15.58	15.20 1	17.18	12.10	12.07	10.75	10.34	11.08	10.26
Guaranteed. Total Phosphoric Acid in	-113.(= :	==	<u> </u>	. i9.	57	. 15	. 15	. 17.	12.	. 12	. 10	. 10		. 10.
in Official Sample. Insoluble Phosphoric Acid	-	13	.:		-		:	_:	· ·	<u>;</u>	5	:	- 21	-:-	
Insoluble Phosphoric Acid	3,24	54.45	5 2. 90	:		0.36	0.47	•	0.88	0.78	0.65	1.77	1.52	1.91	1.46
Reverted Phosphoric Acid	5.00	4.25	4.25	:	:	4.50	5.00	:	:	<u>:</u>			:		
Reverted Phosphoric Acid in Official Sample.	00 3, 30 5, 00 3,	3, 47	75 2.95	:	:	3,75	5,83	:	6.56	4, 09	2,63	4.08	0.03	5,03	3,24
Soluble Phosphoric Acid	4.00	3,753,	3,75	:	:	5,50	7.00	:	:	:	:	:	:	:	:
Soluble Phosphoric Acid in Official Sample.	6.48	5.08	5, 17	:	:	8.04	9.28	-	9.74	7,23	8, 79	4.90	8, 79	4,14	5,56
NAME OF BRAND.	Big Bonanza	Potato Special	4	Pure Raw Rone Meal	Bone and Meat	Phosphoric Acid and Potash	Help Mate	Ohio Valley Bone Dust	Florida Acid Phosphate	German Potash Mixture	Liberty Bell Potash Mixture	Old Sledge Phosphate	Champion Giant Phosphate	Chieftain Bone & Stock Phos	Triumph Pure Bone Phos
NAME AND ADDRESS OF MAN- UFACTURER.	Walker, Stratman & Co., Pittsburg.	Walter, Stratman & Co., Pittsburg.	Walker, Stratman & Co., Pittsburg.	Walder, Stratman & Co., Pittsburg	Wheeling Butchers' Ass'n, Wheeling	Wooldridge, Rob't A., Co., Balto	Wooldridge, Rob't A., Co., Balto	Wooldridge, Rob't A., Co., Balto	Wooldridge, Rob't A., Co., Balto	Wooldridge, Rob't A., Co., Balto	Weeldridge, Rob't A., Co., Balto	Wooldridge, Rob't A., Co., Balto			

Laboratory No.	4500	1100	4148	4276	4208	1113	1196	1131	11.33	625	13.5	1007	1277	75 4114	4133
Valuation of Inspectors?	5.75	26.00	21.75 4148	26,50	23,25 4298	17.00 1113	17.75 1196	15,50 1131	15,00 1123	17 00	2, 70 2, 03 17,00 15 25 11:5	15.75 4207	17.25 18 00 12.71	-1	19,00 4133
Valuation of Official Sam-	27.195	:		:		20.70	:	15.25	:	:	17.00	:	17.25	17.25	
Potash in Inspt'rs' Sampe,	_ :	:	:	:	:	1.75	17.	1.01	1.46	1.0	95.0	1.8	:	:	:
Potashin Official Sample,	:	:	:	:	:	9.79	:		:	:	2.70	:	<u>:</u>		
Sitrogen in Insp'trs Sample	2.57	0.1	5.4	55 Se	2.0	1.1:	1.5	1.05	0.95	0:		:			:
Sitrogen in Official Sample	31			:	:	1.22		0.8	:	:		-	:	:	<u>:</u>
Available Phosphorie Acid in Inspectors' Sample.	_ :		:	:	:	1-	7.63	7. 39	6.82	8, 45	9,87	10.31	14.98	15.07	16.50
Available Phosphoric Acid in Official Sample,		:	_:		:	. S. S.		1. 55.	:	:	11.10 11.10	:	11.6	14.61	
Total Phosphoric Acid in Inspectors' sample,	25.73	25.91	21.62	25,82	21.21	9,20	9.20	9,36	50°	9, 65	71.10	12.11	17.66 11.64 14.99	15,51 15,68 14,61 15,07	17.10
Total Phosphoric Acld in Official Sample.	26.03	:	-	:	:	10,96	:	X.	:		11.96		15,51		
Inspectors' Sample.	:	:	:	:		1.46	1.57	1.97	1.52	8.1	1.23	1.77	5.57	0.61	0.60
Insoluble Phosphoric Acid in Official Sample.	:	:	:	:	:	1, 15	:	100	:	:	.SS.	•	.87	35	
Reverted Phosphoric Acid in Inspectors' sample,	:	:	:	:	:	1.42	1.37	20	17.	17:	5.24 0.	3.44	49 4, 15	49 2, 53 0.	3.41
Reverted Phosphoric Acid in Official Sample.	:	:	:	:	:	35.35	:	i= ci_	:	:	3.85	:	5.45		:
Soluble Phosphoric Acid in Inspectors Sample.	:	:	:			6.32	6.26	2.07	3.98	. S.	4.63	6.90	10.51 2.	12.51	13,00
Soluble Phosphoric Acid in Official Sample.	:		:	:	:	6.45		1.55	:	-	25.25		12.15	12.15	
Agents Zumber.	=======================================	\$		=	15	S65	-5:	正.	93	=	7	31	d 14	d 65	d 74
à	10		al	ıe	16	Bradley Dissolv'd Bone Phos-	sh Bond Phos	phate With Potash radley Niagara Phosphate.	Bradley Niagara Phosphate	3rudley Niagara Phosphate.	Bone	Bone	Dissolved	Dissolved 65 12.15 12.51 2.	Dissolved
BRAND	Bon	Bone	Bon	Bon	Bon	olv'	Pota olv'd	Pota	ara	cara	allne	line	Soluble	Soluble	Soluble
1313	nund	nund	nund	Ground Bone	ound	Diss	Disa	Ning	Nlag	Ning	Alle	Alka	50	Sol	So
	Fine Ground Bone.	Fine Ground	Fine Ground Bone	Fine Or	Fine Ground Bone	Bradley	phate with Potash Bradley Dissolv'd Bond	phate with Potash Bradley Niagara Ph	Bradley	Bradley	Bradley Alkaline Bone	Bradley Alkaline Bone.	Bradley	Bradley	Bradley Bone
MANOFACTURER		.гп.	edu	TO.)	.cal				ultı z sı				mer	t¥ (тре

Laboratory Number.	<u>&</u>	200	908	177	063	111	65	529	213	603	94	392	600	GF.	85	26
Sample.	17.75 4188	25 20.50 4250	18.00 4300	19.50 422	2, 44 18,75 17,50 4290	16.50 4311	18,75 18,50 4249	18.00 4259	18.75 4812	19.25 4209	17.25 18.25 4294	17.75 16.50 4295	0F 03.	21.00 4149	21,75 4185	.25 41
pie. Valuation of Inspectors	. 17	520	. 18	- 19	5 17	. 16	2 18	. 18	<u>∞</u>		3 18	5 16	0.20	21	. 21	0 16,
Valuation of Official Sam-	<u>:</u>	ᄗ		_ :_	18.7	:	18.7	:	:	_:_	17.2	17.7	22.5	_ :_	:	20,0
Potash in Inspectors Sam- ple.	:	2.46	2.20	22.	- 61 - 4	_e	:	:	<u>:</u>	:	:	2:23	2.96	2.80	3,09	1.88
Potash in Official Sample.		5.57	:	:	5.05	:	:	:	:		:	3,01	_3, 96	_ :_	_ :_	8.20
Zitrogen in Inspectors		1.10	0.85	1.09	:	:	:	:	:	<u>:</u>		<u>:</u>	1.63	1.77	1,64	0.87
Zitrogen in Official Sam- ple.		0.97	:	:	:	:	:	:	- :	:	:	:	1.66		:	.89
Available Phosphoric Acid in Inspectors sample	14.77	8, 15 10,78 0, 97 1, 10 5, 57	9, 28	10.03	11.60	11.25	15.98	16.02	16.27	16.86	15,09	11.28	7, 83 1, 66 1, (3 3, 96 2, 96 22, 50 20, 50 4099	7.69	8,64	9.88, $7.86,0.89,0.87$ 3.20,1.88,20,00,16.25,4197
Available Phosphoric Acid in Official Sample	:		:	:	9.97	:	2, 82 3, 75 0, 90 0, 95 17, 10 16, 93 16, 20 15, 98	:			2,38 5,49 0,001,25 15,51 16,94 14,61 15,69	5	8,57	:	:	9.83
Total Phosphoric Acid in Inspectors Sample,	16.96	9,53 12,33	10,84	11.62	3, 60 6, 57 0, 70, 1, 38 11,67 12,98	11.90	16.93	16.71	16.94	17.46	16.94	11.46 11	10.27	11,12	11.44	9.56
Total Phosphoric Acid in Official Sample,		9,53		:	11.67	:	17.10	:	:	:	15.51	63 0, 83 0, 18 12 83	20 2, 44 10.77 10.27	:	:	12.52
Insoluble Phosphori" Acid in Inspectors Sample,	51	1.00	1.56	1.59	1.38	0.65	0.95	0.69	0.17	07.0	1.25	. 18	2,44	3, 43	3.80	1.70
Insoluble Phosphorie Actu in Official Sample.		 	:	:	0.70	-	0.50		:	:	05.0	- 83. - 83.	20.5		:	2. 69
Reverted Phosphoric Acid in Inspectors Sample,	3, 91	3, 45	2.23	2,49	6.97	5,58	3.75	4. S.	3,46	2,93	5.49	3.83	76 1.91 2.	1.52	5, 48	2. 59
Reverted Phosphoric Acid in Official sample.		3, 70 3, 45 1, 38 1, 00	-	:	3, 60		2.85	:		:	2.38	4.26 3.	2.76	- :-	:	2,85
Soluble Phosphoric Acid in Inspectors' Sample	10.86	7.158	7.05	7.54	4,63	5.27	61 61	11.74	12,81	13.93	10.20	7.45	5, 91	8, 17	8, 16	5. 27 2. 85 2. 59 2. 69 1 -70 12.52
Soluble Phosphoric Acid in Official Sample,		4,45		:	6.37	:	13.38 12 23	:	:		12.23	7.24	5.81	:	:	6.98
Agents' Zumber.	1 55	9	35	7	89	<u>~~</u>	-9	7	큚	81	15	15	28	50	31	31
BRAND.	Bradley Soluble Dissolved 31	Bone	Canton Chemical Baker's Special Wheat, Corn and	Grass Mixture	Canton Chemical Soluble	Bone and Potash		Canton Chemical Baker's	Dissolved S. C. Bone		Cleveland Dryer XXX Phos-15 12.23	phate Cleveland Dryer Horsehead	Phosphate and Potash		piete kompound	Detrick's Imperial Compound 31
TURBR.					.910	mi	tls8	g pu	स् अ	лох	W9	Ñ				

The American Agricultural Chemical Company,

17 AND 2 Y XAV						241		144.							
Laboratory Number.	1112	1132	1151	1202	1150	1174	1504	1233	1211	1195	75 4356	25 4205	25 4299	1351	1361
Valuation of Inspectors	14.75	16 00	13.75 1151	14.75	.50 16 50 4150	18.50 4174	18,25 4204	20.25 4233	18.50 4211	25 16.00 4195	15 75	8 25	18.25	16.00 4351	17.75 4361
Valuation of Official Sam- ple.	06.50	:	::		17.50 1	:			:	-1	:	17.50 18			:
Pota-h in Inspectors Sam- ple.	1.78	9.02	1.92	2.07	:	:	:	:	:	1.69	2.11	65	33	.8	2.25
Potash in Official Sample.	99:	:	:	:	:	:	_ :	:		9; (R	:	2,50	:	:	:
Nitrogen in Inspectots Sam- ple.	:	:	:	:	:	:	:	:	:	:	:	1.21	0.87	0.85	0.96
Nitrogen in Official Sample.] :	:	:	_:	:	:	:		:	:		0.95	:	:	
Available Phosphoric Acid in In-pectors Sample,	9.57	10,58	8.21	9.05	13,33	15.43	15.51	17.71	15 93	12,56 12.(5 11.13	10,59	x 1x	9.30	6:5	× 6
Available Phosphoric Acld in Official Sample.	10.55		:	:	14.89	:	_ :	:	:	12.65		8, 15	_ :.	:	:
Total Phosphoric Acid in Inspectors Sample.	53 11.61 10.33	12,54	10 78	11.58	2, 97 10,81 16,30 14,89 13,33	17.91	17.03	18, 10	17.12	3 12,56	11.92	9.80	10.25	9.66	9.40
Total Phosphoric Acid In Official Sample.	=	_ :	:	_ :	10,81		:	:	:	12.98		8.90	. :		
In Inspectors Sample,	2.07	1,96	2, 57	55	2, 97	三 三 5 i	1,52	0.69	1.19	5.68 0.98 1.48	0,33	1.62	0.95	2.67	0.72
Insoluble Phosphoric Acid in Official Sample.	1.52	:		:	0.92	:	:	:	. :	0.93	:_	0.75	:	:	:
Reverted Phosphoric Acid in Inspectors Sample,	3.67	3, 67	3, 54	3,95	2.39 3.06 0.92	97.5	7.	3.07	1.50	5.68	66.5	5.710.	2.30	6.85	2.60
Reverted Phosphoric Acid in Official Sample.	90 2, 72	:	:	:	2.39	. :	_ :	:	_ :	3,5%		1.78	. :	_ i_	_ : _
Soluble Phosphoric Acid in Inspectors Sample.	5,90	6,91	4.67	5, 10	10.27	12,17	10.67	14.61	11.13	5, 15	7.60	2.44	7.00	0.74	6.08
Soluble Phosphoric Acid in Official Sample.	7.61	:	:	:	12.50 10.27		:	:	:	S. 47	:	6.37	:		:
Agents Number.	_ G.	5.0	13	-31	000	160	55	28	07	0.1	35	19	31	33	- SE
BRAND.	Detrick's Soluble Bone Phos-	pnate and Potash Jetrick's Soluble Bone Phos	pnate and Potash betrick's Soluble Bone Phos-	pnrte and Potash Jetrick's Soluble Bone Phos-	phate and Potash betrick's Dissolved S. C. Bone 50	Detrick's Dissolved S. C. Bone	Detrick's Dissolved S. C. Bone	Detrick's Dissolved S. C. Bone 28	Detrick's Dissolved S. C. Bone 20	ern Soluble Bone 67	ern Soluble Bone 38	and Potash Great Eastern English Wheat	Great Eastern English Wheat	Grower Great Eastern English Wheat	Great Eastern English Wheat 38 Grower
8	Detrick's S	Detrick's Soluble	phate and Potash Detrick's Soluble	parte and Potasi Detrick's Soluble I	Detrick's Dissolved	Detrick's D	Detrick's D.	Detrick's D	Detrick's D	Great Eastern	Great Eastern	Great Easter	Great East	Great Easte	Great Easte
NAME OF		rp 2.°	ed u	100				ural					me.	у әт	łΤ

WEST VIRGINIA EXPERIMENT STATION.

Laboratory Number.	4190	4352	1:66	4106	4181	4339	4125	4180	4218	4236	4107	4122	4182	4219	4243	4278
Valuation of Inspectors	19,75	19.00	14.75	17.75 4106	17.50	21.25	16.25	15.00 4180	15.75	15.25	15.75 4107	18 50	17.00	18.00	17.00	18.50
Valuation of Official Sam- ple.	17.50		18.00	19.75	8	:	10 17.75 16.25 4125	:	:	:	18.50	:				
Potash in Inspectors Sam- ple.		:	11 1, 58 18.00 14.75 4.66	1.78	2, 53 22	1.90	ાં	2,15	1.92	2, 10	:	:	:	:	:	
Potash in Official Sample.			3.11	:: ::	:	:	2.52	:	:	:	:	:	:	• :	:	<u>:</u>
Nitrogen in Inspectors	:	<u>:</u>	:	1.00	:	:	:	:	_:	:		:	:	:		
Nitrogen in Official Sample	:	:	:	0.71	:	:	:	:	:	:	:	:	:	:	:	:
Available Phosphoric Acid in Inspectors Sample.	17.08	16, 12	10,15	9.03 0.71	11.10	12.57	10.76	9.63	10.41	10.53	92 12.71	16 06	14.29	16.66	13,75	15.87
Available Phosphoric Acid in Official sample.	14.86	:	11.63	11.31	11,93	:	12.09 11.15 10.76			- :	15 92	:		:		:
Total Phosphoric Acid in Inspectors Sample,	18.10 14.86	17.12	4, 76 0, 82 0, 81 12.45 10.99 11.03 10.15	12.49 10.36 11.31	3.61 0.84 1.22 12.37 12.70 11.53 11.10	13.68	12.09	10.81	11 86	11.13	15 27	16.49	15.89	16.90	16 82	16.71
Total Phosphoric Acid in Official sample.	1.51 1.02 16.40	:	12.45	12,49	12,37	:	01 1.33 14.46		:	:	2,56,16.44,15.27	-	:	:	:	
Insoluble Phosphoric Acid in Inspectors Sample.	1.05	0.70	0.81	1.33	1.22	1.11	1.33	1.18	1,45	09.0	2.56_{\circ}	0, 43	1.60	0.24	3.07	0.84
Insoluble Phosphoric Acid in Official Sample.	1.51	:	0.82	1.18	0.84	:	3.01	:	:	:	0.52		:	:	:	
heverted Phosphoric acid in Inspectors Sample.	25.8.81	1.10	92 T	93	3.61	05.5	4.93 ₃ -	3, 26	5, 73	4.26	3.97	3,66	2.47	4.14	6.78	3.45
Reverted Phosphoric Acid in Official Sample.	1 -:	:	3:	3, 023.	4,57		- 8		:	:	6.5	:	:	:	:	
Soluble Phosphoric Acid in Inspectors Sample.	13.21	12 32	5.39 4.48	5.81	7.87	9.68	5.835.	6.37	4,68	6, 27	8.742	12.40	11.82	12,52	6,97	12,42
Soluble Phosphoric Acid in flicial Sample,	13.61	:	7, 15	- 65 · 8	6.96	:	6.39		:	:	13.30	:	:	:	:	-
Agents Zumber.	61	£	7	_01	37	$\frac{x}{x}$	-5	75	57	252	21	19	7.5	57	32	32
BRAND,	Great Eastern Dissolved Bone 67	Great Eastern Dissolved Bone	Lazaretto Dissolved Bone 71	Maryland "O. K." Ammoni-	ated Fertilizer Maryland Tornado Fertilizer	Maryland Tornado Fertilizer	Maryland Bono Superphos-	phate Maryland Bono Superphos-	phate Maryland Bono Superphos-	phate Maryland Bono Superphos-	phate Maryland Dissolved S.C. Bone	Maryland Dissolved S.C. Bone 61	Maryland Dissolved S C. Bone	Maryland Dissolved S.C. Bone	Maryland Dissolved S.C. Bone	Maryland Dissolved S.C. Bone 32
NAMEOF MANUFACTURER.		'Au	eđu	Con	eal					grie Yor			ıweı	V 91	т	

Laboratory Number.	4340	4120	4115	1217	4090	1216	1215	4278	4332	4347	4354	43.63	4353	\$ 1	4548
Valuation of Inspectors	72.61	14.75	17.50	14.50	17.25	15.25	25 19.00 1215	55	16.75	15.75	15,00 4354	.00 18.00 4343	15,50,4353	18,75,	18.50
Valuation of Official Sam-	:	09 1.10 18.00 14.75	17.25 17.50 4115	01 1, 65 16,25 11,50 4217	8.35 1.22 1.07 2.13 1.39 18.25 17.25 4690	:	19,25	21.50 20.	52 1.62 18.25 16.75 4332	:	:	18.00	:	17.25 18.75,4342	15.25 18.50 4248
Potash in Inspectors Sam- ple.	-	. 10]	-	.65	1,89,1	= -		2. 35 21.	. 62	1.33	1.15	2.17.1	 		
Potash in Official Sample,	-	2.001	:	2.01	2.13	-		3.665	2.52	-	:	86 3			
Nifrogen in Inspectors	:	0.95	:	:	1.07	9. 96	:	1.07	1.01 2.	0.97	0.94	:	-:	:	
Nitrogen in Official Sam- ple,	:	1,08 0.95	:	:	1.2.	.0	-:	?}	1,63	:	0.94	:	:	:	:
Available Phosphoric Acid in Inspectors Sample.	7.26	7.03	4.59	9,52	8.35	7.47	6.35	10,46 1.	8.03 1.03	7.51	8, 33	11.36	10.56	15 90	5.93
Available Phosphoric Acid in Official Sample.	:	8.56	4.65		9,25			9,67,1	8.59		:	11.67		4.63	2.39
Inspectors Sample,	17.59	57	3,18	.951	11.13	67.	1.30	12.(9)	36	9.39	. 80	2,64 1	11.35	1.78	7.22 1
Official Sample. Total Thosphoric Acid in	17	10.17 8.	59 15,49 16,18 14,65 14,59	.95 10,95,10,90	12.22 11	xi :	17.09 17.30 16.81	10.91	.27 9.	с. :	6	12,41112,64	F	65 15.49 17.78 14.63 15 90	29 18,46 17,22 12,39 15,93
in Inspectors tample. Total Phosphoric Acid in	33	51 10.	59 15	÷3.	2i	?! :	0.95 17.	- ES	67 1. 68 1. 80 10.	£	47	Si 25	79	65 15	29 13.
in Official Sample. Insoluble Phosphoric Acid	<u>°</u>	61 1.	- <u>:</u>	05 1.	97.5	-	28 0.	2 <u>7</u>	68,1.	=		74 1.	.0	86 1,	07 1.
in Insoluble Phosphoric Acid	: ::	- E	53.0		55	92	29 0.	73	67 1.	- - -	.: 96	69 0.	· - 4	210.	26 1.07 1.
in Official Sample. Reverted Phosphoric Acid	-i	63 2.	55 4.	13	?;	of :	5	27 -	95 3.	. 2.81	<u>si</u>	26 6.	80	62 5.	28 5.
in Inspectors Sample. Reverted Phosphoric Acid	_ = =	20 3.	ci	-81 F	12 2.67	$^{-19}$	06 1.	. re	4, 39 3, 95 3,	. 07	5.37	4,674.	2	oi.	67 2.
in Official Sample. Soluble Phosphoric Acid	13.	÷	12,10 10,06	17 4.	6.	ಣೆ	Susquehannah Superior Rock 48 15.16 10.06 1.65	ιċ	1.4.	7	 		1:	10.66	58 10.11 10.67 2.
Agents Number. Soluble, Phosphoric Acid	18	10 4.93	10 12.1	_ oč	48 6.58	-3	S 15.	4 6.01	3 4.64	x		8, 7.41	-	8 12.01	8 10.1
Agents Yumber		:		ne 48	Phos-4	Phos-	ck 4	Royal 14	Pacific 23	fic 1	fic 6	red 11	ed 6	Acorn 18	Phos-5
	Maryland Dissolv'd S. C. Bone	ate.	Bone Phos-	Alkaline Bone		Ph	r Ro	Ro	Paci	Prolific	Crop Producer. Villiams & Clark's Prolific 64	Stock Producer. Williams & Clark's Dissolved 18	Done and Fotash Williams & Clark's Dissolved Bone and Potash	Acc	
	as.	osph	Bone	salin	XXV	XXV	perio	rks	k's		k's I	s Die	s Die	K's	. C.
BRAND	olv'	1 Ph	/ed				Sul	Clarks	Clar	er. Clark's	er.	ark'	ark	Clar	ed s.
BR	Diss	No.	ssolv	nnat	nna)	nnal	nnal	ke.	osbr	sanc Se	oduć Š		252	o sport	solv
	land	c A	c Di	eha	rnospnate usquebant	ieha	ehan	Fnospnate.	Sone Phosphate.	Crop Producer. Villiams & Cla	Crop Producer. Illiams & Cla	Stock Producer. Villiams & Clark	bone and Fotash 71111ams & Clark Rone and Potesh	Tilliams & Clar	Dis Fe.
	fary	Pacific A No. 1 Phosphate	Pacific Dissolved	Susquehannah	Phosphate, Susquehannah	pnate. Susquehannah	pnace	Fnospna Williams	Sone Phosphate. Williams & Clark's	Crop Produc Williams &	CE EE	Stoc Villia Bot	Villi	Williams & Clark's	Zell's Dissolved phate.
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<u> </u>															
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	of Inspectors	Sample,	5.75	17 25	6.25.4	16.75 4	17.00 4	17.50 4	16.00 4	15.25 4	15,75	15,50 4	16.00	17.50	5,75	17.00	14.75	16.50^{1}
	-mas IsiomO io	Valuation of ple.		-	8.75 16	-			-		-	_	:	-	16.75 15.75	:	:	
	- wes sam -	pie.			0, 70 2, 85 1, 95 18.	2. 13 	2, 20	2.40	1.5 <u>7</u>	1.36 16.78	1.44	1.71	1.54	2,01	1.87	1.98	2.05	2.33
	Official Sample.		:	:	. 85	:	:	:	:	3	:	:	:	:	3,09	:	:	
	in Inspectors	Nitrogen Sample.	:	:	0.70	0.72	0.88	0.72	0.99	0.95 1.	1.00	0.91	0.87	0.91	:	:	:	
	n Official Sam-	Xitrogen i	:	:	: 0 0,97			:	:	0.97	:	:	:	:		:	:	_;
	Phosphoric Acid		12.86	14,56	œ	8,68	8, 26	9,08	7::37	7.01	7.35	7.20	7.95	s. ss	10,45	11.68	9,13	10.78
	Phosphoric Acid Sample.	Available I in Official	:	:	8.85	:	:	1	:	7,99	:	:	:	:	10,26	:	:	
	sphoric Acid. in	Total hos	11.24	15,18	9.95	0.01	9.72	10,59	8.8	8. 1 2	x. 7x	8, 25	9,68	10 22	11.91	12,14	11.10	12.06
	sphorie Acid in	Total Pho Official 5a	:		9.69	:		:	:	9,03	:	:		:	97 1.46 11.23 11.91		:	-
	Phosphoric Acid tors Sample,	! nsoluble I	1,38	1.62	1.01 1.65	27	1.46	1.51	1.47	Ξ:	1, 43	1.52	1.73	1.3	1.46	1.46	1.97	1.28
	Phosphoric Acid		:	:	1.01	:	:		_:_	1.07	:	:	_:_	:	0	:	:	:
	hosphorie Acid		66	6.82	. 36	2.80	:: ::	2.39	3.13	91 192	4.97	3, 43	3.36	3.25	5,91	7.52	3.92	6.28
	Sample, Sample,	Reverted F in Official			1.91		:	:	:	±	:	:	:	:	97	:	:	:
	hosphoric Acid tors Sample.	in Inspec	9, 20	7.71	5.94 1.91 2.36	5,88	188	69.9	1.25	1.06	3.0s	3.77	1,35	5.63	29 4.51 3.	1.46	5.21	4.52
		∐ in Official	:	:	25.6.91	:	:	-	:	5,55	:	-11-			6.29	:	:	:
		Agents Yu	£8.	89	167	22	Ş: ::	56	1~	55	-08	- i	8	1-	39	98	21	7
}			S. C. Phos-	. C. Phos-											sphate	sphate.	sphate	sphate
	BRAND			Ω	er.	c.	er.	c.	3.	تب	ıt	7	nt.	, t	20	bo	,ho	Pho
			g	ਕ੍ਰ	2	Z	2	Z	Z	2	=	=	2	E.	1-1	2		43
	BRA		solved	solved	omiz	omiz	nomiz	omiz	omize	e Giar	e Giar	e Gian	e Gla	e Giar	tric Pl	trie P	ric I	tric
	BRA		Dissolved	Dissolved	Economiz	Economiz	Reonomiz	Economiz	Economiza	Little Giar	Little Gian	Little Gian	Little Gla	Little Glar	Electric Pl	Sleetrie P	Sleetric I	Electric
	BRA		ll's Dissolved	nate. ill's Dissolved hate	ill's Economiz	ll's Economiz	Il's Economiz	ll's Economiz	ill's Economiza	H's Little Giar	ll's Little Gian	H's Little Gian	Il's Little Gla	Ws Little Glar	Ps Electric Pl	ll's Electric P	Wa Electric I	ll's Electric
	BRA		Zell's Dissolved	Zell's Dissolved	Zell's Economizer	Zell's Economizer	Zell's Economizer	Zell's Economizer	Zell's Economizer.	Zell's Little Giant	Zell's Little Glant	Zell's Little Giant	Zell's Little Glant.	Zell's Little Glant	Zell's Blectric Phosphate.	Zell's Electric Phosphate.	Zell's Electric Phosphate	Zell's Electric Phosphate.
			Zell's Dissolved	Zell's Dissolved	Zell's Economiz	Zell's Economiz	Zell's Economiz	Zell's Economiz	Zell's Economiza	Zell's Little Giar	Zell's Little Gian	Zell's Little Gian	Zell's Little Glan	Zell's Little Giar	Zell's Bleetrie Pl	Zell's Electric P	Zell's Electric I	Zell's Electric
							ore,	mi	ilsa	pu	হে হা	лод	МЭ	N				Zell's Electric
				Zellawe.			ore,	mi	ilsa	pu	হে হা	лод	МЭ	N				Zell's Electric
	AME OF						ore,	mi	ilsa	pu	হে হা	лод	МЭ	N				Zell's Electric

Laboratory Number.	4127	4262	4131	1147	1171	4192	1547	4252	1271	4302	4336	4245	1244	4239
Valuation of Inspectors	19.25	20,50 4262	19.00 4131	18.50 4147	18.75 117	19.70 4192	18.75 4247	17.75 4252	19,00,4271	19,25 4302	17,50 4336	19.75 1245	19.25 1244	20.00 4239
Valuation of Official Sam-	151.151	:	16.75	:		_:	:	:	:	_:	:	19,27	_ ;	
Potash in Inspectors Sam-	6 7 7	ei"	. :	. ;		_;	_ :		. :					
Potash in Official Sample.	- #	. :_	:	_ :	:	_ :_	:		i		<u>.</u>	_ :_	:	<u>:</u>
Nitrogen in Inspector	[항	1.66		:	:	:		:		_	. :		_ :	
Nitrogen in Official Sam-	7.94 1.71	:		:	:	:		:	:		:	:	<u>:</u>	:
Available Phosphorie Acid in Inspectors Sample.		9.06	16.47	16.00	16.12	17.03	16.29	15 23	16,69	16,64	15.05	83 17.35	16,64	17.33
Arailable Phosphorle Acid in Official Sample.	13	:	16.58 14.03	:	:	:	:	:	:	:	:	16.83		
Total Phosphoric Acid in In-pectors Sample,	% ·	10.31		16.59	16.85	17 91	16,76	16.25	17.04	17.45	15.77	18,14	17.39	19.10
Total Phosphoric Acid in (Official Sample,	9.86	:	15.08	:	:	:	:	:	:	:	:	0.79 17.74 18.14 16	:	
Insoluble Phosphoric Acid in Inspectors Sample.] =	1.25	0.51	0.59	0.70	0.88	0.47	1.62	0.35	0,81	0.73	0.7.0	0,75	1.77
Insoluble Phosphoric Acid in Official Sample.	2.09 1.11	:	1.05	:	:	-	:	:	:		:	0.91	:	
Reverted Phosphoric Acid in Inspectors Sample,	2.09	1.77	65	3, 42	3,65	2G 2G	8, 98	S.	3,41	3, 97	ei Si	5,36	6, 10	10.52
Reverted Phosphoric Acid in Official Sample.	5, 85 1, 98	:	5: -11	_ :	:	:		_:	:	1	1	6.79	:	:
Soluble Pho-phoric Acid in Inspectors Sample.		7.27	13,04	12,58	12,47	13.60	12.31	12.43	13.28	12,67	12.37	11.99	10.54	6.81
Soluble Phosphoric Acid in Official Sample.	6.11		11 62		:	:	:		:	:	:	10.01	:	
Agents Number.	1 39	8!	- 25 11	0-1-	7	9	10.	33	24	97	70	31	25	er.
	, ž	cell's Ammoniated Bone Su-	Phos-	Phos-40	Phos-	Phos-	Phos-	Phos-	Phos- 32	Phos-	Phos-	:	:	
	Bon	Bon	Bone	Bone	Bone	Bone	Bone	Bone	Bone	Bone	Bone	:		
ć.	.ted	nted		1 Bc		l Be						:		
BRAND	Zell's Ammoniated Bone perphosphate,	nonia	perphosphate. Zell's Dissolved	phate. Zell's Dissolved	phate. Zellys Dissolved	pnafe. Star Phosphate	Star Phosphate	Star Phosphate						
a	sell's Ammoni perphosphate	V m m	perphosphate, ell's Dissolve	Disse)issc	Disso)issc	Disse	Disse)issc)issc	dsor	dso	dsor
	Ps A	1,8	rpb [s]	phate. ell's	phate.	phate. ell's I	phate.	phate.	phate. ell's	phafe. ell's I	phate. ell's I	pnare. tar Ph	r Pb	r Pr
	Zel	Zel	Zel	pk Zel	Zez	Zel	Zer.	Zel	Zez.	Z Z	Zel	Sta	Sta	Sta
	tur'l New											Works.	Works,	Works,
EB.	The American Agricultur'l Chemical Company, New York and Baltimore.													
TUB	can Agried Company, Baltimore											izer	lizer	lizer
NAME OF MANUFACTURER.	rican Con F Bal	Do.	Do.	Do.	Do.	Do.	Do.	Do.	Do.	Do.	Do.	Fertilizer	Chicago.	Fertilizer
ZN	the Ameri Chemical York and											ır F	ago.	
N.	he A											Armour	mor	Armour Chicago.

Laboratory Number.	4092	4230	4097	4223	4228	4101	4102	4221	4103	4108	4308	4253	4184	4212	4307	4315
Valuation of Inspectors ple.	15.50	15.25	25 12.50	13.50	13.75	:	12,25	18.25 4221	18.00 4103		16.25	20.75 4253	20.25 4184	20.75	20.50	21,25
Valuation of Official Sam- ple.	:	:	15,25	:	:	:	:	17.75	:	:	17.00 16.25 4308	26.75	25.50		:	
Potash in Insprectors Sample.	2, 32	2, 52	1.27	1,54	1.45	:	1.30		:	15.22	2, 22	:	1,26	1,44	1.44	1.26
Potash in Official Sample.		:	2,01	:	:	:	1	:	:	:	2.80	:	1,39	:	:	
Nitrogen in Inspectors	1.12	0,89		:	_ :	13.04	0.18	:	:	:	:	2.13	1.86	1.87	1.77	2,00
Nitrogen in Official Sam-		:	:	<u>:</u>	:	_:	<u>:</u>	:	<u>:</u>	:	_:	2.17	1.82	:	:	
Available Phosphoric Acid in Inspectors Sample.	5,75	6.12	8.01	8,50	9.18	:	7.20	15.61	14.84	:	10,12	18,53	8.80	9,36	9. 19	9,41
Available Phosphoric Acid in Official Sample.	:	:	10.04	:	:	:	:	14,99	:	:	10.79	16.19	9.05		-	 :
Total Phosphoric Acid in Inspectors Sample.	6,95	6.72	8.87	9,53	9.81	0,51	8.19	16.02	15.29	:	13 77	20.14	11.64	11.18	11.35	11.97
Total Phosphoric Acid in Official Sample.		:	11.00				:	16.09	:	:	3,65,12,26 13	18,31	84 11.13 11.64	:	:	
Insoluble Phosphoric Acid in Inspectors Sample.	1.20	09.0	0.86	0,63	0.63	:	0.99	0.41	0,95	:	3.65	12.1.61	2.84	1.82	2.16	2,56
Insoluble Phosphoric Acid in Official Sample.		:	0.96	:		:	:	1,10		:	1.47	_ci_	2.08	:	:	_:
Revorted Phosphoric Acid in Inspectors Sample,	4.07	4.70	6.91 0.	7.48	7.84		7.20	5.72	5.16		8.80	17.46	4.19	4.81	5,02	4.86
Reverted Phosphoric Acid in Official Sample.		:	6.05		:	_:	:	1.49		:	2.24	12.94 17.46	3,56	:		
Soluble Phosphoric Acid in Inspectors Sample.	1 68	1.42	1.10	1.42	1.34	:	:	9.89	9.18	:	1.32	1.07	4.61	4,55	4.17	4.55
Soluble Phosphoric Acid in Official Sample,		:	3, 99	:	:			66 10.50	:	:	8.55	3, 25	5.49			
Agents Number.	r. 66	r. 71	99 -x	99 -x	x- 71	71	7.1	99	71	71	š- 35	r- 63	. 13	. 28	35	. 47
	Fertilizer	Fertilizer.	Mix-	Fall Mix-	Fall Mix-		rte.		:	:	Superphos-	War-	9	e		:
	Fert	Fert	Fall		Fal		sphe		:	:	aper	one,	hat	phat	hat	hate
Ğ.	rite	Farmers' Favorite	and	and	and	:	Corn and Oats Phosphate.		:	:		phate. Dissolved Animal Bone,	Phosphate	Double Eagle Phosphate	Double Eagle Phosphate	Double Eagle Phosphate
BRAND	Favorite	avo	ing	ing	ture. Special Spring and	ood.	ats	:		German Kainıt	Soluble Alkaline	nin	re.	rle P	rle P	le Pl
g H		rs, F	Special Spring	Special Spring	Spr	Ground Blood	nd (Bone.	Bone,	n Ka	All	ed A	ranted Pure. Double Eagle	Eag	Eag	Eag
	Farmers'	rme	ecial	pecial	ure. pecial	rong	rn a	C. B	C. B	rma	able	phate. Jissolv	ntec	uble	uble	able
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	Co.,	Co.,	Co.,	Co.,	Co.,	Ç.,	Co.,	Co.,	Co.,	Co.,	Balto.	Balto.	Balto.	Balto.	Balto.	Balto.
NAME OF	Pulverizing	zing	Pulverizing	zing	zing	zing	zing	zing	zing	Baltimore Pulverizing	Co., B	Co., B	Co., B	Co., B	Co. B	Co., B
NAME OF	lveri	lveri	lveri	lveri	Pulverizing	lveri	Pulverizing	Baltimore. Raltimore Pulverizing Raltimore	lveri	lveri						
TAM	e Pu	e Pu	e Pu.	e Pu.	re. e Pu	e Pu	re e Pu	e Pu	e Pul	e Pu	Saugh & Sons	Sons	Sons	Sons	Sons	Sons
ANI	more	altimore	altimore F	Saltimore F	Baltimore. Saltimore E Beltimore	Saltimore F	Baltimore Baltimore F	Saltimore Baltimore	Saltimore I	mor	h &	b &	Ъ	y q	b &	h &
M	Baltimore	Baltimore Pulverizing	Baltimore	Baltimore Pulverizing	Baltimore Baltimore	Baltimore Pulverizing	Baltimore	Balti Palt	Baltimore Pulverizing	Balti	Baugh	Baugh	Baugh	Baugh	Baugh	Baugh

TABLE II—Continued.

Гарогатогу Литрет.	1551	1161	4316	1261	4183	210	309	1317	1216	160	1214	75 4208	310	27.8	267	665
Valuation of Inspectors Sample,	21.50	26.50 4	27,50 4	27.25,4	17.25	17.75 4210	16.75 1309	19.00	18.00	2,05 21,75 21 50 4094	21.50	F 01	25,4310	20.25 427	18,00 4267	19,50 4255
Valuation of Official Sam-		:	:	:	19 25	: 	:	:	:	21.75				:	:	
Potash in Inspectors Sam-	1.52	_ :	:-	_:_	50 1.74	1.13	. 1.61	1.28	1.51	25 2.05	15.41			:	-	:
Sample, Potash in Official Sample,	1.50	87	.: 2	0;	21	.05	0, 92	- 177	1.12	oi	21	:	:	<u>:</u>	:	
ple.		88	<u> </u>	ಾರೆ :	. 40 0. 9	1.	<u>°</u> :			:61.82	ાં	_: :	<u>:</u> :	:	- <u>:</u> -	
Available Phosphoric Acid in Inspectors Sample.	9. 99	 	:		8.751.	9.54	8.41	9.67	10.03	8.32.1	10.37	6.27	17.62	17.62	15.41	17.03
Availab'e Phosphorie Acid in Official Sample.		:			8,16	:		-		-		14.63 16.27			-	
Total Phosphoric Acid in Inspectors Sample,	11.27	20.64	22.53	21.89	10.01	11,23	9.83	12.42	10.85	10.5	13.56		18.91	19 22,	16.34	17.80
Total Phosphoric Acid in Official Sample,	_ <u> </u>	20.35	:	:	2.8	:	:	:		15	:	16.23	:	:	:	
Insoluble Phosphoric Acid in Inspectors Sample,	2.2	:	<u>:</u>	:	51.29	1.69	1.39	13.75	0.85	11.16.11	3, 19	29 1, 60 0, c0 16.23 16 87	1.29	1.60	0,93	0.77
in Inspectors Sample, Insoluble Phosphoric Acid in Official Sample,	16	- :	:	:-	14 1.65 1.	89	01	62	86	15,2,24	37	29,1.60		- 3 <u>1</u>	51	:
in Official Sample, Reverted Phosphoric Acid in Inspectors Sample	8.	_ :	_ :-		66 3.1	3.0	-;i	+	- 00	51, 3, 1	10.3	08 3.2	5.5	-: -:	ci 	. 3,39
Inspectors Sample. Reverted Phosphoric Acid	6.83	- :	:		5.812.0	86	6.01	0.5	.02	213.	Tr.	12 98 2. (13,88	08.	90	
in Official Sample.	9	-	- :	_ : :	10			<u></u>	6.	.40, 5.	-T- 	13	<u> </u>	13	<u>61</u>	13.64
Agents Number. Soluble Phosphoric Acid	63		17	: ::	13 6.	 	35	47	:	25.5	85	28 12	19	5	59	
BRAND.	Double Eagle Phosphate	Warranted Pure Bone Meal	Warranted Pure Bone Meal	Warranted Pure Bone Meal	General Crop Grower	Animal Bone and Potash	Compound. Animal Pone and Potash	Compound. High Grade Acid Phosphate.	High Grade Acid Phosphate. 63							
NAME OF MANUFACTURER.				• • • • ;	oro	niil	B3	(o°	suc	9 S	ξy	neg	[•••		

Laboratory Number.	7.75 4093	4213	1152	75 4188	4126	1001	4194	4284	4179	4285	4283	4357	4170	1235	25 4304
Valuation of Inspectors	17.75	21,50	25 15.75 4152	12	12.75 4120	15.25 14.75 4201	22.75	19.75	16.50	12,75	18,75	28.00	14.75	22.00 4235	23.25
Valuation of Official Sam-		22.25	$\frac{1}{\infty}$	13.75	:	15.25	20.25	26.00	:	11.25 12.75 4285	3.96 0.86 25.75 18,75 4288	25.75 28.00	20 0.50 0.70 0.89 0.71 12.25 14.75 4170	:	7.61 [1.94] 3.63 [0.96] 0.82 [11.55] 12.06 [10.59] 11.24 [1.86] 2.65 [2.55] 23 [24.00] 23 [24.00] 23 [24.00] 23 [24.00] 23 [24.00] 24 [24.
Potash in Inspectors Sam-	:	2.00	57 1.18	:	:	11.11	:	63 1.73	1.47	:	0.86	:	0.71	1.92	2.23
Potash in Official Sample.		3 2, 12	3,1.57	:	:	1.38	:	22	:	:	3.96	:	0.89		2,55
ple. Nitrogen in Inspectors Sample.	:	2,00 1.73	7.11 1.65 0.93 1.		-:	<u>:</u>	1.75 1.85	9, 95, 2, 45, 1, 30	1.60	. <u>:</u>	8, 44 11.20 2, 65 1, 00	64 3.07	0. 70	1.78	3 1.81
Nitrogen in Official Sam-	:	2.0	1:0	:	:	:	1.7	27	:		2.6	<u>ଅ</u>	0.5		3:
Available Phosphorie Acid in Inspectors Sample.	15.03	9,65	7.1	9.05	9, 15	10.2			5.77	9,75	11.20	:	∞	10.22	11.24
Available Phosphoric Acid in Official Sample.	:	8.89	9.34	10.34	:	10,47		9.87		8.27		:	6.10		10.59
Total Phosphoric Acid in Official Sample.	16.08	11.77	22 11.78 12.33	13.92	13.01	89 13.21 13.11 10.47 10.22	23.50	11.27	7.57	11.25	12,75	21.52	10.32	11.12	12.06
Total Phosphoric Acid in Official Sample		11.00 11.77	11.78	1.87 13.27	:	3.21	20.55 23.90	6, 12 1, 48 1, 32 11, 35 11, 27	:	9.61 11.25	9, 98	25.35	7.78		1.55
Insoluble Phosphoric Acid in Inspectors Sample,	1.05	2, 12	10	1.87	3.89	2.89		1.32	1.80	50	55	<u>-31</u>	2, 12	0.00	. 82 1
Insoluble Phosphoric Acid in Official Sample,	:	2,11	2,44	2, 93	:	2.74	:	1.48	:	24 1.34 1.	1.54 1.	:	89). 96 (c
Reverted Phosphoric Acid in Inspectors Sample,	2.76	4.76	5.26	5,65	4.81	5.41	:	6. 12	4.34	8.24	6.71 1.	:	5. 14 L.	3,58	3.63
Reverted Phosphoric Acid in Official Sample,		3,36	4.62	5,67	:	5, 43	:	3.51	:	2.00 8.	2.94	:	2, 32	:	1.94
Soluble Phosphoric Acid in Inspectors Sample,	12.27	4,89	1.85	3,40	4.34	4.81		82° 8	1.43	1.51	4, 49	:	3,06	6.64	7.61
Soluble Phosphoric Acid in Official -ample,	:	5,53	4, 72	4.67	:	5.04	:	6.36	:	6.27	5.50	:	19 3, 78	:	8,65
Agents Number	<u>5</u>	\$2 \$2	GF.	5	11	5	5	22	69	83	.37	x	19	55	16
BRAND.	High Grade Acid Phosphate.	Wheat Fertilizer	Harvest Bone	Dissolved Bone Phosphate	Bower, Frillizer Co., Eliza- Dissolved Bone Phosphate	Dissolved Bone with Potash	Bone Meal	Bone, Blood and Potash	Bone, Blood and Potash	Mt. rleasant Phosphate	Wheat Special	Ground Bone	"O. K." Fertilizer	Number One Bone Phosphate 56	Farmers Standard Ammoni-16 ated Phosphate.
NAME OF MANUFACTURER.	Baugh & Sons Co., Balto	Baugh & Sons Co., Balto	Bowker Fertilizer Co., Eliza-	Bowker Fertilizer Co., Eliza-	Bowker Fertilizer Co., Eliza	Bowker Fertilizer Co., Eliza-	Bowley, Y. F. Bone Meal Bone Meal both N I	Chicago Fertilizer Co., Chi-	Chicago Fertilizer Co., Chi-	Chicago Fertilizer Co., Chi-	Chicago Fertilizer Co., Chi-	Jereeki Chemical Co., San-	Jerecki Chemical Co., San-	Furmers Fortilizer Co.,	G. Ober & Sons Co., Balti- more,

Laboratory Kumber.	1841	1289	6011	1601	1238	1286	1338	9601	4240	1287	4272	1138	75 4358	1280	1136	1355
Valuation of Inspectors	20.50 4841	20,50 4289	20.75 4109	1.98,19.70 16.50,409.	17,50 4238	18.75 4286	.5.20,50 4338	18.50 4096	20.50	19.75 4287	19.75	13.00 4138	13,75	14.25 4280	13.00 4136	14.50 4355
Valuation of Official Sam-	20 75	:	:	19.70		:	18.15			:	:	15.00			22.50	
Potash in Inspectors Sam-	6:	1.99	2, 26		55	5.51	:		:	:		:	:	:	1.4	2.56
Potash in Official Sample,	2.5	:		. 55 1. 55	_:-		_ :						:	:	8.24	
Nitrogen in Inspectors	1.19 1.15	1.13	1.36				:	_ :	_ :	_		-	_ :			
offeregen in Official Sample			<u>:</u> .	:		;			•			:				
A vailable Phosphore Acid in Inspectors Sample,	10.81	11.13	10.29	11.51	12.21	13 11	17.3	15.99	18.10	17.49	17.30	10.0	10.66	11.25	8,14	8.28
Available Phosphoric Acid in Official Sample,	10 0		:	11.62	:	:	15.78	:	:		:	12.03	:	:	9, 79	
Total Phosphoric Acid in Inepectors Samile.	12.04	12,31	11.49	88-11.77 11.62	12.38	13,75	0.32 16.06 18.20 15.78 17.88	16,23	18,65	17.67	17,85	1, 48 13.57 11.56 12.03 10.08	12 83	13.00	9.65	9,67
Total Phosphoric Acld in Official Sample.	11.08	:	:	11 58	:	:	16,06	:	:	:		13.57		:	1.54 11.15	:
Insoluble Phosphoric Acid in Inspectors Sample.	1.30	1.18	1.20	0.26 11	0.17	0.04	0.35	0.27	0.55	0.15	0.55	1,48	2, 17	1.75		1,39
Insoluble Phosphoric Acid in Official Sample.	1.00 1.	:	:	0.26 0.3	:	:	51	:	:	:	-:	F: ::	:	:	1.36	-
Reverted Phosphoric Acid Inspectors Sample.	2.14	0.95	1.65	71 1.53 0.	6. 0.	2, 65	3, 71 0.	5; 57	2.67	3, 43	3.01	10.6 62	3,44	4.74	7.18	2.84
Reverted Phosphoric Acid in Official Sample.	0.86	:	:		:	:	1.85	:		:	:	oi	:		2, 26	
Soluble Phosphoric Acid in Inspectors Sample.	S. 70	10.21	8.64	9.98 1.	10.12	10,40	(4,17	13 27	15,43	14.06	14.2)	1.07	7.18	6.51	93.0	5,44
Soluble Phosphoric Acid in Official Sample.	9. 99		:	9, 91	:		18 18.98 14.17	:	:	:	:	9.24	:	:	7.53	:
Agents Number.	15	68	77		99	69	<u>x</u>	-99	99	6	T	7	55	5	7	52
ć		:		Phosphate 66	Phosphate 66	Phosphate 68	and Potash. Dissolved Bone Phosphate	Dissolved Bone Phosphate	Dissolved Bone Phosphate.	Dissolved Bone Phosphate .	Dissolved Bone Phosphate	,			Soluble Bone and Potash	Soluble Bone and Potash
BRAND	Mixture.	ture	ture	Bone	sh. Bone	one	ne F	ne F	ne F	ne F	ne P	ate.	ate.	ate.	and	and
BR	Mix	Farmers Mixture	Farmers Mlxture		and Potash. Dissolved B	and Potash. Dissolved Bone	and Potash. Jissolved Bo	d Bo	d Bo	d Bo	d Bo	ddso	qdsc	qdsc	sone	3one
	ners	ners	ners	Dissolved	and Pota Dissolved	Pot	olve	olve	olve	olve	olve	Pho	РЪ	Pho	ble I	ble I
	Farmers	Farr	Farr	Disse	and Diss	and Diss	and Diss	Diss	Diss	Diss	Diss	Acid Phosphate.	acid Phosphate	Acid Phosphate	Solu	Solu
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ER.	G. Ober & Sons Co., Balto.											Ohio Farmers Fertilizer Co.,				
NAME OF	30.,											erti!i				
A CO	ons (Do.	Do.	Do.	Do.	Do.	Do.	Do.	Do.	Do.	Do.	rs F	Do.	Do.	Do.	Do.
NUN	S 30											rme	pna			, ,
MA	Ober											o Fa	Columbus			
	G.											Ohi	ರ			

Laboratory Number.	4282	4116	1137	1168	1360	1831	4118	4117	1119	4321	4199	4329	4160	4193	9390
Valuation of Inspectors Sample.	14.50	13.50	17.50 4137	18.75 4168	17.00 4360	18.00 4281	16 25	19.25	24.00 4119	24.50	14.75	16.25	17.00	20.50	20.75 4330
Valuation of Official Sam- ple.		19.50		:	-		25.75				16.00 1	:	:	$ 20.25 _{2}$	
Potash in Inspectors Sam- ple,	2.37	0.83	1.18	1.15	2.31	1.28	05 1.48	1	4.25	3.98	2.03	2.78	1.44	2.23	1.63
Potash in Official Sample.	:	3,91	:	:	:	_ :	₹;	:	:	:	2.46	:	:	1.86	:
Nitrogen in Inspectors	:	0.74	0.39	0.83	0.65	1.27	1.03	2,80	2.68	1.80	:	:	:	1,52	1.26
oldmas IsiomO ni negoviiN		0.00			<u>:</u>		69	:	:	:	:	:	:	1,25	
Available Phosphoric Acid in Inspectors Sample.	8, 66	6 57	9, 20	11.10	90.6	8,78	7.36 2.		5,92	10.45	9,35	9.97	11.55	8.62	10.60
Available Phosphoric Acid in Official Sample.	:	တိ	:	:	:	i	8, 15	:		:	9,92	:	:	9.56	:
Total Phosphoric Acid in Inspectors Sample.	10,16	9.24	11.41	13,75	10.84	10.32	10.29	15.45	7.83	12.77	10.26	10.94	16.31	13.29	15,15
Total Phosphoric Acid in Official Sample,		9.34	:	:	:	:	9.82	:	:		11.74		-	15.58	:
Insoluble Phosphoric Acid in Inspectors Sample.	1.50	2.67	2.11	. 46	1.78	.54	12.03	:	1.91	2.32	0.91	0.97	4.76	4.67	4.55
Insoluble thosphoric Acid in Official Sample.	:	1.01	:	-11-	:	:	1.67	:	:	:	1.87	:	-2-	6.02	
Reverted Phosphoric Acid in Inspectors rample.	6.75	5.93	4.63	5.71	3,50	1.58	5.94	:	1.92	4,55	1.90	8, 36	5.46	5.78	5.90
Reverted Phosphoric Acid in Official Sample.	:	2, 34	:	:	:	- :-	2.06	:	:	:	82	:	:	4.59	:
Soluble Phosphoric Acid in Inspectors Sample.	1.91	2.64	4.67	5, 40	5.56	4.20	09 1.32	- :	1.00	5, 90	7.45 2.	1.61	6.18	2.84	4.70
Soluble Phosphoric Acid in Official Sample.	:	5,99	:	i	:	_ :	6.09	:	:	-:	7.10	:	:	4.97	
Agents Number.	70	10	7	52	55	70	10	10	10	55	2	36	:	20	36
á	Soluble Bone and Potash	General Crop Fish Guano	General Crop Fish Guano	General Crop Fish Guano	General Crop Fish Guano	General Crop Fish Guano	Wheat Fish 10 6.	Guano. Fine Ground Bone Meal	Fotato and Truck Fertilizer	Potato and Truck Fertilizer	Grade Bone	Grad Bone	Grade Bone	and Fotash. Pure Raw Bone Mixture	Mixture
BRAND	еап	p Fi	p Fi	p Fi	p Fi	p Fi	and	1 Bo	ruc	Frue	High	High	igh	one	one
麗	Bon	Cro	Cro	Cro	Cro	Cro	ats	onu	nd ?	nd 7		tash s H	S H	W B	W B
	Soluble	Genera	General	Genera]	Genera]	Genera	Corn, Oats and	Fine Gr	Fotato a	Potato a	Farmers	Farmers H	Farmers High	Pure Raw Bo	Pure Raw Bone
OF URER.	ertilizer Co.,	ertilizer Co.,	ertilizer Co.,	ertilizer Co.,	ertilizer Co.,	ertilizer Co.,	ertilizer Co.,	ertilizer Co.,	ertilizer Co.,	ertilizer Co.,	Airy Guano	Airy Guano	Airy Guano	Airy Guano	Airy Guano timore.
NAME OF MANUFACTUREE.	Ohio Farmers Fertilizer Co.,	Ohio Farmers Fertilizer	Ohio Farmers Fertilizer	Ohio Farmers Fertilizer Co.,	Obio Farmers Fertilizer Co.,	Columbus, Onio. Ohio Farmers Fertilizer Co.,	Ohio Farmers Fertilizer Co.,	Columbus, Onlo. Oblic Farmers Fertilizer Co.,	Ohio Farmers Fertilizer Co.,	Obio Farmers Fertilizer Co.,	Piedmont Mt. Airy Guano	Piedmont Mt. Airy G	Piedmont Mt. Airy G	Piedmont Mt. Airy G	Piedmont Mt. Airy G Company, Baltimore

TABLE II- Continued.

Laboratory Number.	75 4191	1161	1123	4124	1141	4157	4142	1163	41-15	4327	4227	4146	4095	45.22	4313	1328
Valuation of Inspectors	16.75	19,75 1161	14,00	6.75	14,75	18 00	17,75 4142	17.75 4163	18,00 4145	24.0	23 00	20.75 4146	20.75	24.50	19.00	22.75 4328
Valuation of Official Sam- ple.	17.50	- - -	38 20.25 14.00 1123	18 25 16.75 4124	24,1,33,1,44,0,78,18,25,14,75,4141	39 2, 10 19, 50 18 00 4157	:	18.0	:	23.00	:	:	:	:	10 0.94 18,75 19,00 4313	:
Potash in Inspectors Sam- ple.	-	-:-	18	:	.781	2, 10 1	1.36		-	2.86	1.01	82	1.84	1.58	0.94	1.26
Potash in Official Sample,	:	÷	3,23,1	:	1.44	2, 39	-	:		2.96				-	2, 10	1.26
Nitrogen in Inspectors	-		:	:	1,33	.26 1. 06 2.	1.11	:		1,59	1.54	184	1,74	1.94	26 1.15	1.75
Nitrogen in Official Sample.	:	:	:		1.24	1.26	:	:	:	00	:	:	:	- :-		1.72
Available Phosphoric Acid in Inspectors Sample.	14.25	17.99	9.11	3.35 0.56 3.59 16.30 17.08 15.74 13,49	8.0311.	8.39 1	8,84	14.15	14.51	8, 96 12.23 2.	12,38	8.36	8.85	14.20	10.32 1	12.56.
Available Phosphoric Acid in Official sample.	14.55	- 1	13,44	15.74	9.05	9, 27	:	15.76	:			:	:	:	8.62	
Total Phosphoric Acid in Inspectors Sample,	25 14.60 14.55 14.25	18 17	2,85 13,82 11,97,13,44	17.08	10,15 10 90	46 0.58 2.52 10.20 10.91	11.65	4. 81 1. 63 3, 16 17 39 17,64 15,76 14,15	19 37	3.22 10.17 1.56 2.89 10.52 15.12	13,39	11.87	12.24	15 27	3,93 11.00 14.25	15.54
Total Phosphoric Acid In Official Sample.	17.25	:	58.8	16.30	10,15	10.20	1	17 39	:	10.52	:	:	:	:	11.00	
Insoluble Phosphoric Acid in Inspectors Sample.	70 0.35 17.	0.55	21	3, 59	2.87	2,52	Z i	3,16	4.86	ŝi ŝi	1.01	3,51	3, 45	1.07	3, 93	80.08
Insoluble Phosphoric Acid in Official sample.	ាំ	:	0.38	0,56	5, 41 11.10 2.87	0.88	:	1.63	:	1.56	:	- :	:	:	2.38	:
Reverted Physphoric Acid in Inspectors Sample,	2.15	9.11	6.01		5,41	10	5,72	4.81	4,30	10.17	10.24	7,89	3.14	12,50	6.23	8.20
Reverted Phosphoric Acid in Official Sample.	1.74		2,44	0 63	2, 57	5.6	:	3, 53	:		:	:	:	:	2.67	-:
Soluble Phos, horic Acid in Inspectors sample,	12.10	8.11	3,13	10.14	2,65	95 G	3, 12	9.67	10.21	13 08	2,14	0.97	5, 68	1.70	4.00	4.36
Soluble Phosphoric Acid Official Sample.	12 S1	:	1.00	15.11 10.14 0	6, 48	6.58	:	30 12.23		5.71	- :			- :	5,95	-
Agents Number.	5,12		29 11.	23	140	- 2	=		49	53	50	6	99	99	17	23
BRAND,	High Grade S. C. Bone	High Grade S. C. Bone	Rasins, Bone and Potash	Fertilizer. Rasins Acid Phosphate	Bone Mixture	Premium Wheat Grower	Premium Wheat Grower	High Grade Acid Phosphate.	High Grade Acid Phosphate.	Superphosphate	Superphosphate	Superphosphate	Superphosphate	Superphosphate	Complete Fertilizer	Complete Fertilizer
NAME OF MANUFACTURER.	Piedmont Mt. Airy Guano	Company, Baltimore. Piedmont Mt. Airy Guano	Company, Baltimore. Rasin-Monumental Co.,	Baltimore. Rasin-Monumental Co.,	Baltimore. Rienmond Guano Co., Rich-	mond, Va. Richmond Guano Co., Rich.	mond, Va. Richmond Guano Co., Rich-	mond, Va. Richmond Guano Co., Rich-	mond, Va. Richmond Guano Co., Rich	Swift & Co., Chicago.	Swift & Co., Chicago	Swift & Co., Chicago				

Laboratory Number.	141	1144	105	814	1326	955	0.72	8601	1220	104	1159	1162	1155	1203	1206
Valuation of Inspectors	21.00 4141	28,00.4144	27.75 4105	25.25 4314	26.50 4326	28.50 4226	23.50 4270	25.25 4098	26.75 4220	26.25 4104	19.25 4159	17.75 4162	15.25 4155	15.75 4203	17.50
Valuation of Official Sam-	:	28 75 2	:	26.50		:	- 54	34	- 24		20.75		15.25		3.00 1.67 19.25 17.50 4206
Potash in Inspectors	1.87		:	:	:	:	:	:	:	:	1,26	1.11	:	:	1.67
Fotash in Official Sample.		_:	_:_	_ :	_ :	_:	:		:	:	1.67	:	_ :	:	3.00
Nitrogen in Inspectors	1.92	4.10	_3.86	2.46	2.71	3,36	1.71	2.43	2,66	2, 76	1.70	1.12	<u>:</u>	:	9.15 0.93 0.91
Nitrogen in Official Sample	:	3,96	:	2.81			:	:	:		1.85	:	:	_ <u>:</u>	0.93
Available Phosphoric Acid in Inspectors Sample,	9.32	:		_ :	:	:	:	_ :	:	:	8.121	9.15	12.13	12.73	
Available Phosphoric Acid in Official Sample,		_:	:	:_	:	:	:		:	:	8, 75		12.09		9.21
Total Phosphoric Acid in Instectors Sample.	14.02	21.93	22.79	26.42	25.91	26.38	26.07	25.51	26.64	25.37	11.04	11.45	75 14.46 14.88	15,40	10.77
Total Phosphoric Acid in Official Sample.		23.52		25.67		:	:	:		:	12.00	:	14.46	:	5.13 2.85 4.02 1.82 1.62 11.03
Insoluble Phosphoric Acid in Inspectors Sample.	4.70	:	:	:	:	:	:		:		92	2,30	2, 75	2.67	1.62
Insoluble Phosphoric Acid in Official Sample,		:	:	:	:	:	:	 :	:	:	3.25	:	2,37	:	1.82
Reverted Phosphoric Acid in Inspectors Sample.	5.09	_:	_:_	_:	:	:	:		_ :	:	2,71	3, 23	5.41	6.14	4.02
Reverted Phosphoric Acid in Official Sample,		_:	:	<u>:</u>	_ :	<u>:</u>	:	:	:	:	_2.23	:	3,70	:	2.85
Soluble Phosphoric Acid in Inspectors Sample.	4, 23	:	:	:		_:	:	_:_	:		5.41	5,92	6.72	6, 59	5.13
Soluble Phosphoric Acid in Official Sample,	_ :	:		-:-	<u>:</u>	:	:	:	:		6.52	:	8.39	:	6.36
Agents Number.	67	49	71			32	32	99	99	<u> </u>	19 pu	nd 51	$rd _{51}$	rd 31	Allison & Addison Little Gi'nt 31 Grain and Grass Grower.
					:	:				:	Allison & Addison Star Br'nd Guano.	Allison & Addison Star Br'nd Gnano	Standard	Standard	Gi'
	:	:	:	:			:	:		:	Star	Star			Grain and Grass Grower
ND.	Complete Fertilizer		:			:	:	:	:	:	gon	son	Addison	Allison & Addison	iss G
BRAND.	Perti	Raw Bone Meal	Raw Bone Meal								ıddi	١ddi	llison & Addiso	Ilison & Addiso	Gra
H H	ete I	опе	one	feal	[ea]	Teal	[eal	Meal	[ea]	feal	& A 3.	38		300	& A and
	mpl	W B	w B	Bone Meal	Bone Meal	Bone Mea	Bone Meal	Bone 1	Bone Meal	Bone Meal	Ilison Guano.	Ilison (Allison &	ison	son
	ညီ	Ra	Ra	Bo	Boi	Bo	Bo	Bo	Bo	Bo	Ξū	\[\frac{1}{2} \]	A	44	Alli
	:	:	:		:	:			:	:	Chemical Va.	iaal	nical	ical	ical
NAME OF MANUFACTURER		:	::	:	:	:	:	:	:	:	Chem Va.	/ irginia-Carolina Chemiaa] Co Bichmond. Va.	Chemical	Chemica]	Chemical a.
OF	cago	cago	cago	cago	cago	cago	ago	cago	3ago	3ago	3, V	na Ch I. Va.			
NAME OF UPACTU	Chi	Chi	Chi	Chi	Chi	Chi	Chic	Chi	Chi	Chic	olin	rolir	na-Carolina Richmond	la-Carolina	ia-Carolina Richmond,
N N I	Co.,	Co.,	Co.,	Co.,	Co.,	Co.,	Zo.,	Co.,	Co.,	20.,	Car	chm	Car	Car	Chr
MA	4	t &	t &	t &	t &	t &	, C.	t &	t &	t & (7trginla-Carolina Co., Richmond,	irginia-Carolina Co Richmond.	/irginia-Carolina	irginia-Carolina Co Bichmond	7 irginia-Carolina Co., Richmond,
	Swift & Co., Chicago.	Swift & Co., Chicago	Virg Co.	Virg Co.	Virgit	Virgin	Virg Co.								
	-	42	94		-2	92	44	G 2	G2	42			-	-	-

Laboratory Number.	1161	1189	1158	1165	16,50 1156	1359	1151		1172	12:6	£333	1320	127.4	178	1551
Valuation of Inspectors	15,50 1161	1.32 16 (0 12.75, 1189	11.75 1158	15 50 16.00 1165	16,50	17,50 20,25 4859	16.25 1151	٠	25 20.50 1172	21.00 12:6	22,25 4833	20.50 1320	23.50	46,48, 6,003,30,2,833,214,17 13,02 13,00 9,78 8,83 2,17 1,63 5,04 4,05 27,00 23,25 1178	15 5 08 6.30 3.47 4.38 1.45 0.11 13 00 11 61 8.35 11.23 2.80 1.81 7.30 6.33 32 25 27.75 1201
Ple. Valuation of Official Sain-		16 (0	:	15 50	:	17.50			38.95				11.20 1.20 1.09 1.83 1.52 21.00	27.00	32.25
Potashin Inspectors	1.9.1	55	1.29	:_	:	:	=		80 2.81 98.	22 21	9:	2,00	1.52	1.05	6.33
Potash in Official Sample.		- ∂i oi	_:	-	. :	:	:_		92 01				92 	5.04	7.90
Sitrogen in Inspectors	0.88		:			:	_:_		7.83 2.16 1.83 2.	1.75	11.96	1.93	1.09	_ _	7:
Nitrogen in Official Sample			- ;	:	:-	_:			3.5.16			:	1.20	3 2. 17	ži_
Available Phosphoric Acid in Inspectors Sample.	6.95	1.7.	10.05	3.5	13.20	17.5	13.11			8,66	$\frac{\infty}{\infty}$	7.46	11.20	T.	11.3
Arailable Phosphoric Acid in Official sample,		10,90 10,51	_ :	12.8		35	. :_		× .3	:	:	:_	10.89	9, 78	8.00
Total Phosphoric Acid in	×.	10,90	12.75	7,913,82 1,82,0,78,2,62 13,62 15,18 12 81 12.86	16.91	16 1, 17 15, 45 18,05 11,99 17,58	16.68		6) 3.02 11 62 10.88	11.11	111.71	10.43	12.24 12.58	13.00	11 61
mi bios phoric Acid in Official Sample.		58,01		13,62	:	15,15			11 62	:	:	:	51	13.02	13 00
Insoluble Phospnoric Acid in Inspectors sample.	1.60	3,515,26,0,283,16,10,82	2.67	2.62	5,71	1. 17	100		3.05	4 0i	3.	2. 97	11 4, 02 1, 30 1, 38	1.17	0.11
Insoluble Phosphoric Acid in Official Sample.		0.28		2, 78			:		2.6	:		:	J. 40	77 27	1.45
Reverted Phosphoric Acid in Inspectors Sample.	61 01	5.26		3.	1.60	1.72	3.		2.96 2.	4.85	13	3.46	1.02	99 01	- -
Reverted Phosphoric Acid in Official sample,	:	50.0	-:	3.	:	.0.5	:		00 17	:		:	::	9:30	3.47
Soluble Phosphoric Acid	13	3. 58	4.8		8,60	_21 _21	×.		5, 66 1, 87 8,	55	÷.	1.06	7.15.5	6.0	95.59
Soluble Phosphoric Acid in Official Sample.		7.00	:	9.05		0.5			[5, 66	:	:		7.15	6.18	5 08
redmnZ stnegA.	t	- 55_	1e 5]	÷.	- ' -		_ or		- :	: E	. 27	09 :	16	-	==
BRAND.	Allison & Addison Little Gint 51	S. W. Traver's Capital Bone 31	Ja	and Potash Compound. S. W. Thrver's Capital Dis- 109.02	Solved S. C. Done. S. Traver's Capital Dis-51	Solved S. C. Bone. S. W. Tarver's Dissolved Bone 11 (2.0 [2 86 2, 0) 1, 72 0.	7.	r rosburgo.	Four Fold	Four Fold	Four Fold	Four Fold.	Grain King	Big Bonanza	Potato Special
	Chemical	Chemical	Chemical	Chemical	nical	Chemical	Chemical		Co.,	Co.,	Co.,	Co.,	Co.,	Co.,	Co.,
RER	Cher	Cher	Cher	Cher	Chemica	Cher	Cher		n &	n &	n &	n &	a u	n de	જ પ
NAME OF MANUEACTURER	Virginia-Carolina		ia-Carolina	Virginia-Carollna	la-Carolina	a-Carolina			Walker, Stratman	Walker, Stratman	Walker, Stratman	Walker, Stratman	Walker, Stratman Pittsburg	Walker, Stratman	Walker, Stratman Pittsburg.

Laboratory Number.	41167	6721	.25 4319	1166	26 4297	4293	SEE	1,92	.50 4237	50 -1229	4334	1231	4942	13.14 42.68 42.68
Valuation of Inspectors Sample,	28.00	28.25 1275	28.25	20.00	22.25	16 00 4293	16.75 4318	16,75 1.92	30	19 50	50 16.25 4334	19.00	19.25 4242	18.25 4344 11.75 20.75 4232 8.75 19.50 4268
ms2 laisin of Official Sam	28.00		:	27.00 20.00 1166		77 1.97 17.75	:	17.50	18.75	:	16.	79 19.25 19.00 4231		21.75 18.75
Potash in Inspectors Sam-] _ :	_:	_:	:	_ :	1.97	: .	_:	_:	:	2, 27	್ಷ	2.90	%. 2. 2. 2. 15 11. 15
Potash in Official Sample.		:	:	:	_ ;			_:	_:	:	2, 10	- 4.28	_:	- <u>: 43</u>
Vitrogen in Inspectors	_ 25	3,76	8.76	2.01	_st_	2.719	<u>:</u>	:		:	:		:	1.20
Vitrogen in Official Sample	3.67	:	:	4.31	<u>:</u>	:	:	:	:	:	:	:	:	
Available Phosphoric Acid in Inspectors Sample,	, i	:	:	:	:	10 37	10.59	13,69	15,84	17,05	10,86	18.11	13,20	8. 80 8. 66 1. 37 1. 20 4. 26 8. 82 10.81 1. 05 0. 87 2. 60
Available Phosphoric Acid in Official Sample.	:	:	:	:	:	11.79	:	15,11	16,20	:	11.3%	11.42	:	
Total Phosphoric Acid in Inspectors Sample.	23.71	28.97	28.95	18.09	20,60	12,15 13,23 11,79	11.63	15,58 15,98 15,11 13,69	19.74 10.53 6.56 5.12 0.88 0.78 17,18 16.63 16.20 15.84	17.18	71 4.09 3, 15 0, 78 0, 73 12, 10 11, 59 11, 32 10, 86	7.87 2.63 5.24 0.65 0.40 12.07 13.51 11.42 13.11	18.57	Liberty Bell Potash Mixture, 37 8.72 8.36 0.27 12.05 (Liberty Bell Potash Mixture, 87 17 2.36 0.027 11.084 Trutumph Pure Bone Phos. 1 5.56 4.23 2.14.31 1.60 881 0.39 9.50 Champion Glaut Phosphate [638, 7940.816, 636, 650 1.02 1.29 10.3412.04
Total Phosphoric Acid in official Sample	23.02	:	:	19,49		12,15	:	15,58	7,18	:	12,10	12.07	:	10.26
Insoluble Phosphoric Acid in Inspectors Sample.	:	:	:	:	:	9::0	1.0	2.21	0.78	D. 13.	9, 73	0,40	0.17	0.27 0.31 0.88 1.28
Insoluble Phosphoric Acid in Official Sample,		:	:	:	:		:	0.47	- 88.7	0. 13	78,	.65		0.27 0.31 1.46 0.88 1. 02 1. 23
Reverted Phosphoric Acid in Inspectors Sample.		:	:	:		1.74 0.3	5, 83	7.84 5.83 5.85 0.47	21.0	1.	3. E. C.	.21(61	25 4 5 2 5 6 2 6 7 6 2 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7
Reverted Phosphoric Acid in Official Sample.	1	:	:	:	:	92	:	88	99.7		.09	-89	2.5	0.03
in Inspectors Sample.		:	i	:	<u>:</u> -	5.633.	4.76	-10- 10-	.53 6	12.88	-11-	. S.	8.16	8, 12 8, 17 4, 23 10,31 0
in Official Sample.	:	:	- <u>:</u>	<u>:</u> :	:	0.4	- :	30 20	= 12	===	55	8.79 7	<u>x</u>	79 10 10 10 10 10 10 10 10 10 10 10 10 10
Agents Number, Soluble Phosphoric Acid	:	46	: 09	÷	15	15.8.	0.0	15 9.	1 19.	: :	37.7	oć T	21 :	87 62 1 5.56 63 8.79 1
	:	:	:	:	:	sh.		:		-	:	re.		re cos
		:				Pota	ota		te::	te	re.	Liberty Bell Potash Mixture.	Liberty Eell Potash Mixture.	Liberty Bell Potash Mixture, dberty Bell Potash Mixture. Friumph Pure Bone Phos. thampion Glant Phosphate
	al	а]	11	:	:	nd F	nd F	:	ppa	ohat	extu	Mi	ı Mi	Mi Mi one osp
Z D.	Me	Me	Pure Raw Bone Meal			id a	id n	:	Florida Acid Phosphate.	Florida Acid Phosphate.	German Potash Mixture.	tasl	tas	tash tash t Ph
BRAND,	sone	sone	one	fent	feat	Λei	Ac	:	d P	d P	tasl	1 Po	l Po	Pot Por lan
щ	. W IE	w E	W B	nd N	ld N	oric	orte	rte.	Aci	Λci	ь Ро	Bel	Eel	Bell Bell h
	e Ra	e R	e Ra	e ar	e nr	sph	sph	b Ma	ida	ida	mar	rty	rty	erty mp apic
	Pure Raw Bone Meal	Pure Raw Bone Meal	Pur	Bone and Meat	Bone and Meat.	Phosphoric Acid and Potash.	Phosphoric Acid and Potash	Help Mate.	Flo	Flo	Ger	Libc	Libe	Liberty Bell Potash Mixture, iberty Bell Potash Mixture. Trumph Pure Bone Phos. Champlon Glant Phosphate
	Co.,	Ço,	Co.,	Co.,	Co.,	Co.,	Co.	Co.,						
H	್ರ ಇ	3) O	رد د	O 30	S 30	23	رد	43						
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NAME OF	Stratman	Walker, Stratman Pittsburg.	Walker, Stratman Pittsburg	Walker, Stratman	Walker, Stratman Pittsburg	Walker, Stratman	Walker, Stratman	Walker, Stratman Pittsburg.	-33	GG (drid	oloo'	Bar I' IA	Robert A
J'AM	stra	Str.	Stra	. Ri	Stra °	$\sin z$	$^{\circ}$ Str	st.						
A N. A	er,	Valker, St Pittsburg	er,	er,	er,	cer,	Walker, Pittsbur	Valker S						
M	Walker,	/alk	Jalk Pitte	Valle	Aalk	Alk	alk Mits	/alk						
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Table III.—Is devoted to fertilizers registered under the New Law, and consists essentially of a comparison of two series of statements in regard to the brands of fertilizers therein mentioned; the first by the manufacturer and copied verbatim from his affidavit; the second, being the results of examination of samples found on sale in the State.

The amount of the various constituents claimed, and the amount found in the samples collected by the inspectors are arranged in parallel columns.

As has been carefully explained in previous publications of this Station, this New Law demands a consideration not only of the amount of the various constituents of plant food claimed to be contained in a fertilizer, but also the quality, or to quote the Statute, "the materials from which said constituents are derived."

As to the materials mentioned as sources of the various constituents it should be said of the comparatively few brands in this table, that all are doubtless as claimed with the exceptions of "Superphosphate" and "Bone and Animal Tankage," manufactured by Marietta Bone and Phosphate Co., where it is claimed that the potash is derived from "Sulphate of Potash," while as a matter fact it is derived from "Kainit." In order to be perfectly fair it should be said that there was in this instance, an excellent opportunity for a misunderstanding on the part of Manufacturers trying for the first time to comply with the rather unusual requirements of this New Low. "Sulphate of Potash" was claimed and "Kainit" was found, but the potash in Kainit is present as sulphate of potash. The law requires that such materials shall be stated clearly in commercial terms. "Kainit" is the commercial term that would have described most accurately the source of Potash in this instance. Had Kainit been stated, the purchaser would have been advised that the fertilizer contained about so much common salt along with compounds of magnesia, which according to the best authorities might be desirable or objectionable according to circumstances, and it does not matter whether such opinions in regard to such matters be true or false; whether manufacturers attach any importance to such matters, or whether the farmers know, or care anything about them, it is clearly the intention of this Statute that the purchaser shall be provided with just such information at the time the purchase is made, and this will have to be done. We heartily approve of this feature of the New Law. Indeed we can hardly understand how any one is to use a fertilizer to the best advantage without such information in regard to the materials from which it is manufactured, and we believe that this provision of the Law will eventually be found to be a matter of the greatest interest, not only to the purchaser but also to the manufacturer of commercial sertilizers.

We have given somewhat more space to this matter than would have been necessary, but for the fact that it affords an opportunity to make clear to manufacturers the character and object of the requirements of this Law, with the hope that similar misstatements may be avoided in the future. We will be perfectly frank to state that we have no reason for believing that the misstatement in question was other than the result of a misunderstanding.

TABLE III.

	Potash Found.	2.01	101	:	:	1.02	3.31	. 26	2,15	21	10.	:	% 9F 1
	Potash Guaranteed,	9	.0012	:	:	00 1.	8	50	8	00	00.2	-	2.00 1.46
izers	Nitrogen Found.	1.57 2.	82 0.96 1.00 2.10	:	:	0.82 0.82 1.00	95 1.75 0.85 3.	.781	82 1.20 2.	.00 2.	.86 2.	:	1.17 1.00 0.82
ertit	Nitrogen Guaranteed.		8.8	÷	:	.820	.750	1.00 0.	0.821	1,642.	.45 2.	:	
ial f	Available Phosphoric Acid Found.	8.56 1.65	0.30	0.14	4.24	8.85	6,951	6, 46	00:1	.49	50 11.50 1.45	6.10	15.31
mer	Available Phosphoric Acid Guaranteed.	8.00	8,00:10.30 0.	1.00	16.00.1	9.00	9.00	8.00	9.00,11.00	8.00 11	s. 50	1.00	14.00 15.31 17.56 9.00 11.24 0.82 8.50 7.70
com	Total Phosphoric Acid	10.20		13.00 12.40 11.00 10.14	3.03 17.00 17.27 16.00 14.24	10.73	9.57	9.16	12 15	12.26	59	70 15.00 16.80 14.00 16.10	2. 19 15.00 17.15 14.00 15.31 1. 57 19.13 17.56 2. 38 10.00 13.59 9.00 11.24 1. 98 9. 50 9. 68 8. 50 7. 70
rning	Total Phosphoric Acid	9.00	10.00 12.91	13,00	17.00	11.00	12.00	10.00	09.01	11.00 12.26	10.00 12.	15.00	2.19 15.00 17.15 1.57 19.13 2.38 10.00 13.50 1.98 9.50 9.68
once	Insoluble Phosphoric Acid Found.	1.64	2.61	2.26	3,03	1.3	2. 62	2.70	1.15	12	1,09	0.70	2.19 2.38 1.98
et, c	Insoluble Phosphoric Acid Guaranteed.	1.00	2.00	2.00	3.58 1.00	2.00	:	;	50 2, 44 1, 50	3.00 0.	1,50	1.00 0.	1.00
sed a	Reverted Phosphoric Acid	2.01	7.74	6.53	3.58	4.85	5. 10	5, 18	2.4	2.27	2,51	1.24	5.04 4.34 4.65 4.89
revis	Reverted Phosphoric Acid Guaranteed.	5 2.00	5 2.00		:	_ :_	::	:	11.50	2.00	2:00	- :-	00 :: : : : : : : : : : : : : : : : : :
nder	Soluble Phosphoric Acid	6.55	2,56	9:0	10.66	4.00	1.85	1.28	8.5611.	9.55	8.99.2.	11.86	12.00 10.27 2.
01, u	soluble Phosphoric Acid	6.00	6.00		_ :		:	:	3.50	6.00	6.50		12.00
l 19	Laboratory Number.	4305	4265	4176	4177	. 4175	4354	4325	. 4263	1258	4234	4269	hos- 4225 hos- 4257 4148 and 4139
Showing claims and analysis of samples of brands registered in 1901, under revised act, concerning commercial ferlitizers.	BRAND,	Canton Chemical Game Guano	Wheat, Corn and Oats Special	Electric	Enterprise	Anti-trust	Superphosphate	Bone and Animal Tankage	Special Mixture of Wheat	Shenandoah Bone Phosphate	S. & S. Special Wheat Compound.	Dissolved S. C. Bone	Guaranteed 14 per cent. Acid Phate. Cuaranteed 14 per cent. Acid Phate. Blood and Bone Phosphate Gilt Edge Dissolved Bone Potash.
Showing claims and analy	MANUFACTURER.	American Agricultural Chem. Co.,	Baltimore. Armour Fertilizer Works, Balti-	more. S. Frank & Sons, Zanesville, Obio	S. Frank & Sons, Zanesville, Ohio	S. Frank & Sons, Zanesville, Ohlo	Marietta Bone and Phosphate Co.,	Marietta, Onio. Marietta Bone and Phosphate Co.,	Marietta, Obio. G. Ober & Sons Co., Baltimore	G. Ober & Sons Co., Baltimore	G. Ober & Sons Co., Baltimore	R. H. Pollock, Baltimore	Vi.ginia Carolina Chemical Co., Richmond, Va. Virginia Carolina Chemical Co., Richmond, Va. Virginia State Fertilizer Company, Virginia State Fertilizer Company, Virginia State Fertilizer Company, Richmond, Va.

TABLE III.-Continued.

	GUARANTEED SOURCE OF POTASH.	20 per cent Manure Salt.	Kainlt			Muriate	Sulphate of Potash	Sulphate of Potash.	Sulphate of Potash	Suiphate of Potash	Sulphate of Potash				Sylvinite	Sylvinite
	GUARANTEED SOURCE OF NITROGEN.	Bone Tankago,	Bone Tankage			Beef and Pork Cracklings	Bone and Animal Substances	Bone and Animal Substances and Nitrate of Soda.	High Grade Bone and Blood Tankage and High Grade Fish.	High Grade Bone and Blood Tankage and	High Grade Bone and Blood Tankage and High Grade Bone	might of such that,			Tankage	
	GUARANTEED SOURCE OF PHOSPHORIC ACID.	Bone Tankage and Phosphate Rock	Florida Acid Phosphate	Phosphate Rock	Phosphate Rock	Acid Phosphate,	Bone and Animal Substances and Phosphate Rock.	Bone and Animal Substances and Phos- phate Rock.	High Grade Florida Phosphate Tankage and Fish.	High Grade Florida Phosphate Tankage and Fish.	High Grade Florida Phosphate Tankage and Fish.	Ph	Charleston and Tennessee Rock	Charleston and Tennessee Rock	Tennessee Phosphate Rock	Tennessee Phosphate Rock
]_	Laboratory Number.	4305	4265	4176	4177	4175	4324	4325	4263	4258	4234	4269	4225	4257	4143	4139

- 1 T. H. Avery, Jones' Springs, 4231, 4232, 4237.
- 2 Burns Bros., Charleston, 4106, 4107.
- 3 George Brinkman, Grafton, 4132.
- 4 W. H. Brand, Laurel Point, 4166, 4167, 4171, 4172, 4178.
- 5 H. C. Bair Hardware Co., Alderson, 4188, 4191, 4193, 4194, 4199, 4201.
- 6 W. H. Brady, Berkeley Springs, 4249, 4250.
- 7 Belington Mill Co., Belington, 4348, 4349, 4350.
- 8 John Burdette, Hurricane, 4357.
- 9 W. F. Carrothers, Little Falls, 4112.
- 10 Gilbert Core, Jimtown, 4115, 4116, 4117, 4118, 4119, 4120, 4121.
- 11 Charles Coombs, Morgantown, 4126.
- 12 E. W. Clark, Dellslow, 4175, 4176, 4177.
- 13 L. W. Conway, Laurel Point, 4183, 4184.
- 14 O. R. Carmen, Wellsburg, 4276, 4277, 4278, 4279.
- 15 Cox & Bro., West Union, 4291, 4292, 4293, 4294, 4295, 4296, 4297, 4298.
- 16 J. J. Chisler, Fairmont, 4304.
- 17 W. L. Cole, Clarksburg, 4313, 4314.
- 18 A. G. Chrislip, Philippi, 4338, 4339, 4340, 4341, 4342, 4343, 4347.
- 19 Damron Feed & Seed Co., Huntington, 4170.
- 20 A. S. Dannon, Shepherdstown, 4241.
- 21 DeHaven & Hudson, Cherry Run, 4242.
- 22 N. E. Duckworth, West Union, 4283, 4284, 4285.
- 23 W. R. Dudley, Wheeling, 4326, 4327, 4328, 4332.
- 24 Dyer & Switzer, Philippi, 4335, 4336, 4337.
- 25 Exchange Mill Co, Grafton, 4127, 4128, 4129, 4130, 4131.
- 26 A. R. Feaser, Terra Alta, 4345, 4346.
- 27 G. S. F. Griffith, Moundsville, 4333.
- 28 Henshaw & Lichlider, Martinsburg, 4093, 4094, 4099, 4208, 4209, 4210, 4211, 4212, 4213, 4214, 4233, 4245.
- 29 Isaac Hite, Morgantown, 4123, 4124.
- 30 J. E. Hines, ———, 4157, 4163.
- 31 J. W. Hedrick, Alderson, 4185, 4189, 4196, 4197, 4198, 4200, 4202, 4203, 4204, 4206, 4207.
- 32 G. T. Hodges, Shepherdstown, 4225, 4226, 4227, 4236, 4243, 4244, 4260, 4262, 4265, 4270, 4271, 4273.
- 33 R. Hunter, Berkeley Springs, 4252, 4356.
- 34 J. M. Hagerty, Farmington, 4305, 4306, 4311, 4312.
- 35 C. Hall, Farmington, 4307, 4308, 4309, 4310.
- 36 James Hawker, Manington, 4329, 4330.
- 37 Howe, Philippi, 4334, 4344.

- 38 T. M. Harbour, Hurricane, 4356, 4361.
- 39 J. L. Hall, Fairmont, 4300, 4301, 4302, 4303.
- 40 Johnson & Gwine, Ronceverte, 4147, 4148, 4165, 4192.
- 41 Kinsley & Price, Uffington, 4136, 4137, 4138.
- 42 Kane & Keyser, West Union, 4299.
- 43 C. D. Kyle, Wheeling, 4324, 4325.
- 44 J. F. Kinley, Scary, 4359.
- 45 W. N. Lemon, Shepherdstown, 4239, 4254.
- 46 J. S. Liggett, Wellsburg, 4274, 4275.
- 47 R. T. Lowndes, Clarksburg, 4315, 4316, 4317.
- 48 J. H. Miller & Son, Martinsburg, 4090, 4100, 4215, 4216, 4217.
- 49 J. M. Miller & Bro., Roncevert, 4139, 4140, 4141, 4142, 4143, 4144, 4145, 4146, 4152.
- 50 McClung & Rader, Ronceverte, 4149, 4150, 4151, 4153.
- 51 E. W. McNeer, Lowell, 4154, 4155, 4156, 4158, 4159, 4161, 4162.
- 52 C. V. McClung, Hurricane, 4168, 4355, 4358, 4360.
- 53 Mossman Bros., Huntington, 4169, 4173.
- 54 W. H. McCallister, Hurricane, 4174.
- 55 Walter Marshall, Wheeling, 4321, 4322, 4323.
- 56 J. H. Metz, Martinsburg, 4235.
- 57 McKown & Busey, Martinsburg, 4218, 4219.
- 58 J. T. Morrison, Bedington, 4247, 4248.
- 59 Capt. Melvin, Duffields, 4267.
- 60 J. D. Owens, Weston, 4318, 4319, 4320.
- 61 J. A. Poole, Morgantown, 4122, 4125.
- 62 T. Price, Clinton Furnace, 4186.
- 63 J. H. Phillips & Sons, Berkeley Springs, 4229, 4246, 4251, 4253, 4255, 4261, 4264, 4268.
- 64 Cicero Phillips, Belington, 4353, 4354.
- 65 L. G. Reppert, Easton, 4113, 4114.
- 66 Sencindiver & Stewart, Martinsburg, 4091, 4092, 4095, 4096, 4097, 4098, 4220, 4221, 4222, 4223, 4234, 4238, 4240.
- 67 J. E. Sinbaugh, Alderson, 4190, 4195, 4205.
- 68 W. F. Hill, Pennsboro, 4286, 4287, 4288, 4289, 4290.
- 69 J. P. Thompson, —, 4179.
- 70 Taylor & Athey, Parkersburg, 4280, 4281, 4282.
- 71 Washington & Alexander, Charleston, 4101, 4102, 4103, 4104, 4105, 4108, 4109, 4224, 4228, 4230, 4257, 4258, 4259, 4263, 4266, 4269, 4272.
- 72 J. L. Woodyard, Pruntytown, 4180, 4181, 4182.
- 73 R. H. Woodford, Philippi, 4351, 4352.
- 74 Henry Zembro, Fetterman, 4133, 4134, 4135.









